# THE BOOK WAS DRENCHED

UNIVERSAL
LIBRARY

OU_160801

UNIVERSAL
LIBRARY

# Modern Economic Development

## Volume II

*By*

B. S. BHIR, M. COM.

*Bombay Educational Service, Sydenham College of Commerce and Economics, Bombay. At Present Government of India Scholar at the London School of Economics.*

and

N. S. PRADHAN, M. COM.

*Bombay Educational Service, Professor of Modern Economic Development & Administration, Sydenham College of Commerce and Economics, Bombay.*

KITAB MAHAL

ALLAHABAD BOMBAY

First Edition, 1955

Published by Kitab Mahal, 56-A, Zero Road, Allahabad, India
and Printed by P. N. Bhargava, at the Bhargava Bhushan Press, Banaras.

*To*

**Revered Parents**

# PREFACE TO VOLUME II

In presenting this Second Volume of our work, we offer a sincere apology to our readers for the delay in its publication. Yet we have a sense of satisfaction in meeting a long-felt need for a work of this kind. We have maintained the same pattern as in the First Volume, in making a comprehensive survey of the economic development of the U.K., Germany, the U.S.S.R., the U.S.A., Japan and India. The present Volume deals with Agriculture, Trade, Transport and National Income, whereas the First Volume is concerned with the Evolution of Capitalism, Industrial Development and Population. Here also, as in the First Volume, we have traced the developments during the last hundred years, where necessary, with a greater emphasis, however, on the economic progress made by the various countries in the present century. In this Volume we have also added a small section as Appendix C dealing with certain aspects of Pakistan's economy.

This work is an attempt to meet the requirements of the Indian students preparing for the B. Com., M. Com. and M.A. examinations, for which a study of the economic history of the major countries is prescribed. We have endeavoured to be lucid in our expression and thorough in our treatment, and the Chapters on Trade and Transport have been particularly written with special attention to the needs of the M.Com. students for their paper in International Trade and Transport, and of the B.Com. students who have offered Economics of Transport as their Special Subject.

Although the book is meant principally for students, we sincerely hope that it will enlighten the general reader, who is interested in the subject. At the end of each Chapter we have given a selected bibliography of the more important works, related to the topic.

We express to Dr. S. K. Muranjan, Principal of the Sydenham College of Commerce and Economics, Bombay, our gratitude for his interest in the work and constant encouragement, of which he is an unfailing source in any academic undertaking. We are also grateful to Mr. Mangesh Muzumdar, B.Com. and Mr. W. R. Gawanday, M. Com., whose specialised studies on Motor Transport and Civil Aviation in India, respectively, were of immense help. Lastly, our special thanks are due to Miss Homai Dubash, B. Com., who undertook a major portion of the secretarial duties, connected with this Volume, read the proofs, and compiled the index, which, we hope, will add to the usefulness of the book.

**B. S. Bhir**

5, Grenville Street,
Russell Square,
London, W.C. 1.

**N. S. Pradhan**

Sydenham College of
Commerce and Economics,
Bombay, 1.

# CONTENTS

## CHAPTER I

## AGRICULTURE

PAGES
1-80

*Great Britain.* A historical review 1, State aid to agriculture 7.

*Russia.* A historical review 11, Soviet agriculture and the Five Year Plans 15.

*Germany.* A historical review 20.

*Japan.* A historical review 25, State aid to agriculture 28, the postwar period 31.

*The U.S.A.* A historical review 34, the New Deal 37, the war period and postwar developments 40.

*India.* The situation on the eve of the first Five Year Plan 46, the first Five Year Plan: the outlay 55, the targets 56, land reforms 58, agricultural finance 60, agricultural marketing 63, improved seed, manures, and fertilisers 64, agricultural implements and machinery 64, agricultural education and research 65, animal husbandry and dairying 66, soil conservation 67, fisheries 67, irrigation and power 68, the progress of the Plan : foodgrains 71, cotton 73, jute 75, sugarcane 76, oilseeds 76, land reclamation by Central Tractor Organization 77, key villages 77, soil conservation 78, grading and fumigation 78, other Central Government schemes 78.

Selected Bibliography 80.

## CHAPTER II

## TRADE

81-260

*India.* 1914-1919 81, 1919-1929 83, 1929-1939 86, a note on India's foreign trade during 1914-1939 90, India's foreign trade during the second World War 91, trade control 96, India's foreign trade from 1945 onwards 97, Indo-Pakistan trade 102, trade agreements of India: Ottawa Agreement of 1932 106, the Bombay Lancashire Textile Agreement 110, the Supplementary Indo-British Trade Agreement 113, the new Indo-British Trade Agreement (1939) 114, the Indo-Japanese Trade Agreement (1934) 117, the new Indo-Japanese Trade Agreement (1937) 120, the Indo-

Burma Trade Agreement (1941) 122, recent trade agreements 123-132, foreign trade and commercial policy in the first Five Year Plan 132, external assistance 135, I.M.F.'s estimate of India's need for external assistance 137, U.S. aid for projects 138, State monopoly of foreign trade 138-144 : the system of controls 139, benefits of State monopoly 140, trade policy 141, Foreign Trade Corporation 142.

*The U.S.S.R.* 145, the composition and direction of Soviet foreign trade 152, the organization of Soviet foreign trade 155, the system of Soviet foreign trade on the eve of the second World War 161, planning of Soviet foreign trade 163.

*The U.S.A.* 167, export trade 167, import trade 174, tariff and commercial policies of the U.S.A. 178, dollar shortage 185, U.S. foreign aid 187, military assistance 187, economic and technical programmes 188, the technical co-operation programmes 188, importance of imports 188, foreign economic policy of the U.S.A. 189.

*The United Kingdom.* 194, commercial policy of the U.K. 198, the Ottawa Conference 201, trade agreements 202, balance of payments 205, external trade since 1938 207, finance and regulation of trade 213, State trading 215, Government assistance to oversea trade 215.

*Japan.* 217 : 1881-1913 217, 1914-1929 218, Japanese competition in world markets 220, 1929 onwards 221, commercial policies of Japan and recent developments 228, trade agreements 230, regulation of foreign exchange and foreign trade 230, Japan enters the War 234, trade developments after the War 235.

*Germany.* 240, Commercial policies of Germany 248, post-war developments 252.

Selected Bibliography 260.

## CHAPTER III

## TRANSPORT

261-492

*Great Britain.* 261, *Railways in Great Britain* 261, railways and motor road transport 264, railways and canals 266, present position of British railways 267, *British Shipping and Shipbuilding* 270, British shipping lines 274, shipping organizations 276, shipping and Government 277, ports, docks and harbours 277, *Civil*

*Aviation in the U. K.* 278, the functions of the Civil Aviation Ministry 278, aerodromes 279, the Corporations 280, the B.O. A.C. 282, the B.E.A. 283, independent air line companies 283, *Roads and Road Transport in the U.K.* 284, the Road Haulage Executive 288, London Transport 289, the London Transport Executive 289, the British Transport Commission 290.

*The U.S.S.R.* 293, *Railways in Soviet Russia* 293, after the Revolution 294, during the Plan era 295, during the War 296, restoration of the railways 299, postwar Five Year Plan 300, *Mercantile Marine in Soviet Russia* 303, future prospects of the Soviet mercantile marine 304, *Soviet Inland Water Transport* 305, *Air Transport in Soviet Russia* 307, air transport during the War 308, future prospects of Soviet air transport 310.

*Germany.* 312, *Road Transport in Germany* 312, rail-road competition 315, *Railways in Germany* 318, recent developments 321, transport legislation in Western Germany 321, inter-zonal trains between Western and Eastern Germany 323, transport problems of Western Germany 323, *Shipping in Germany* 325, German shipping and the Peace Treaty 327, German shipping after 1919 329, *Air Transport in Germany* 333, the State and civil aviation 336, German penetration in Latin America 337.

*The U.S.A.* 338, *Railways in the U.S.A.* 338, recent developments 342, *Roads and Road Transport in the U.S.A.* 343, motor traffic 344, public passenger transport 345, freight transport 346, road-rail competition 347, *Inland Waterways* 350, *Shipping in the U.S.A.* 353, *Civil Aviation in the U.S.A.* 366, present position of U.S. civil aviation 370.

*Japan. Japanese Railways* 373, recent position of Japanese railways 374, *Roads and Motor Transport in Japan* 375. present position of motor transport 376, *Shipping and Shipbuilding in Japan* 377, Japanese shipping and shipbuilding today 384, *Civil Aviation in Japan* 388, present position of Civil Aviation 390.

*India. Roads in India* 392, the Jayakar Committee, 1927 394, the Central Road Fund 394, the Indian Roads Congress 395, the Nagpur Plan 395, the Central Roads Organization 397, road development and the first Five-Year Plan 397, progress of road development since the Plan 398, *Motor Transport in India* 400, the scheme (of nationalisation) in general 404, the administrative set-up 406, working and progress 406, success 408, efficient and adequate transport 408, maximum comfort 410, co-ordination with the railways 410, employment 410, self-supporting 411, better travelling facilities 413, finances 414, *Railways in India* 417, the situation on the eve of the first World War 417, after 1914 418, the Acworth Committee 418, the question of State management 419, State control and railway authority 420, the Railway Board 422, separation of the railways and the general budgets 423, the Railways Finance Committee and the Inchcape Committee 424, Government action on the Reports 425, railway development since 1922 426, the Wedgwood Committee 428, the railway rates policy 429, Rates Advisory Committee 430, the Federal Railway Authority 431, World War II and Indian railways 431, the Partition 432, railway rehabilitation 433, Chittaranjan Workshop 434, financing the Railway Plan 435, rail transport expansion since Independence 435, Assam's problem 436, new construction 437, progress under the Five Year Plan 439, railway regrouping 441, benefits of regrouping 443, the Railway Conventions 444, the Convention of 1943 445, the Convention of 1949 446, reorganization of the Railway Board 448, *Shipping and Shipbuilding in India* 450, the glory that was India 450, the downfall of Indian shipping 452, modern shipping in India 452, Scindia Steam Navigation Co. Ltd. 452, hostility of British shipping interests 453, rate war and deferred rebate 453, the Indian Mercantile Marine Committee, 1923 455, the report shelved 456, training ship 457, Haji's Coastal Reservation Bill, 1928 458, Joint Shipping Conference 460, during depression 460, the Bhore Award 462, rate war in Haj Pilgrimage 462, Konkan rate war 462, abolition of the deferred rebate system 463, War and after 463, Reconstruction Policy Sub-Committee on Shipping, 1945 464, overseas service 465, Shipping Conference of 1947 and the shipping policy of the Government 466, Government participation in shipping 467, reservation of coastal trade 467, Indian Coastal Conference 468, reservation of coastal trade and refinery products 468, Five Year Plan and shipping 469, coastal shipping and the Plan 470, overseas shipping and the Plan 470, fiscal concessions and the Plan 470, sailing vessels and the Plan 472, technical training and the Plan 472, *Shipbuilding in India* 474, *Inland Waterways* 478, *Civil Aviation in India* 481, early beginnings 481, second World War and after 482, effects of Partition 483, Kidwai's 'All-up' Mail scheme 484, Night Air Mail Scheme 484, Air Transport Inquiry Committee, 1950 485, Committee's case for state ownership 487, case against state ownership 487, the Air Corporations Act, 1953 488, external service 489, conclusion 489,

Selected Bibliography 491,

## CHAPTER IV

## NATIONAL INCOME

493-530

*The U.S.A.* 493.

*The United Kingdom.* 502, the social accounts 506, the gross national product by industry of origin 511, the earlier estimates 511.

*India.* 514, the earlier estimates 516, Appendix A 517, Appendix B 521.

*Russia.* 522, the national income and the Five Year Plans 523.

*Japan.* 526.

*Germany.* 528.

*International Comparisons* 529.

Selected Bibliography 530.

APPENDIX C

Certain aspects of Pakistan's Economy 531, The Agrarian Problems 531, The Industrial sector 537, A review of the foreign Trade 1948-52, 542

INDEX 547-556

# CHAPTER I

# AGRICULTURE

## GREAT BRITAIN

*A Historical Review.* The forties of the last century witnessed the mechanisation of British agriculture. Industrial areas were getting more crowded, the means of transport were fast improving and the application of fertilisers was becoming more and more popular. The imports of foreign food-stuffs were small; foreign competition did not become acute until after 1870. In 1846, the Corn Laws were repealed and grain was admitted duty free. During the two decades that followed, British agriculture flourished; the urban demand for meat and dairy produce was excellent. This period of prosperity, however, suddenly ended during the seventies and Britain experienced an agricultural depression during the last quarter of the nineteenth century. During this period, developments in transport created conditions of international competition. Railway construction opened up vast areas of virgin territory in the New World; spectacular reductions in railway and shipping freights were brought about. This led to a rise in the agricultural imports from the New World to the continent of Europe and to Great Britain. Tariff protection was resorted to by Germany; other continental countries also followed suit. Britain, however, adhered to a free-trade policy. The British farmer, had, therefore, to adjust and adapt agricultural production to this new overseas rivalry. On the rich prairy lands of the New World, grain could be grown at very low costs; the use of new mechanical appliances was an additional favourable factor. In 1850, three-fourths of Britain's wheat imports came from the Baltic or Black Sea ports and only one-eighths from North America. By 1870, the total imports of the country had almost doubled; they supplied about half of the country's flour requirements and nearly half of the imports came from America. By 1880, the total imports were nearly doubled again but the supplies from America had almost trebled and they accounted for three-quarters of the total imports. The prices of grain in the European markets in the nineties thus tumbled down to half the level prevalent during the sixties. Grain production evidently became much less remunerative in Great Britain. This revolution in food supplies, however, pleased the consumer. Violent fluctuations in supply and price were now a thing of the past; for, if Europe's harvest was bad that of America might be good. The hungry forties and the fear of famine were forgotten. To the farmer, on the other hand, this large influx of imports was a tragedy. Wheat market was hit first and hardest. The landlords had to absorb the financial shock by remitting or reducing rents or by cultivating the land themselves or by using it for sport. The capital value of land dropped in 1894 to about a half of what it was n 1875. There was a decline in the number of farm labourers. There was recorded a marked shrinkage in the area of arable land through its conversion to pasture. The arable land which accounted for 59% of the cultivated area in 1871-75 had shrunk to 46% by 1906-10. The period thus witnessed a prolonged agricultural depression which was aggravated by a downward movement of prices in general.

As a result of this agricultural depression during the last quarter of the nineteenth century, British agriculture changed its direction or emphasis. Vast food imports were accepted as inevitable and only those products, *viz.*, perishable and high quality produce, in which competition was virtually absent, came to be nursed. There was thus recorded an extension of dairy farming, fruit-farming, market gardening and stock-breeding. Arable farming favours large farms and employment of specialised mechanised devices while farming of this new variety requires close personal attention and favours small farms. This naturally led to certain changes in the size-distribution of agricultural holdings. Small and medium farms with a size varying from 20 to 100 acres became more numerous while the number of large farms of over 300 acres experienced a decline. As the pasture land provides employment for fewer workers than arable land, there was a decline in agricultural population between 1871 and 1911 in spite of the rapid increase in total population. The growing industrialisation of the country, however, increased the opportunities for alternative employment in the towns and the cities while the provision of better transport facilities made it physically easier to take advantage of these opportunities. Thus, we notice that even during the period of depression in agriculture, *viz.*, 1874-96, there was recorded no serious decline in the money wages. In fact, between 1896 and 1914, there was a rise of about 25% in the real agricultural wages in spite of a reduction in the demand for labour.

An acre of arable land yields on the average several times the quantity of food produced on an acre of pasture. Since the seventies of the last century, the process of converting the arable land to pasture had started and on the eve of the first World War, more than three million acres of arable land were converted to pasture. The number of persons fed on the produce of the home soil thus naturally declined. In 1913, Great Britain imported four-fifths of her wheat supplies and two-fifths of her meat supplies. By this time, however, there was brought about a stable and satisfactoty recovery in the level of agricultural prices. The price curve turned upward in 1896 and by 1913, the prices of vegetable as well as animal foods rose by more than thirty per cent. During the period of the first World War, an urgent need to increase the supplies of home-produced food was felt on account of the increasing submarine activity of the enemy and the shipping losses. In 1915, the War Agricultural Committee was established in each county and it was given extensive powers to be used in the extension of the arable acreage, the ploughing up of grass land and the production of more food. In 1917, the Food Production Department of the Board of Agriculture was formed to administer the policy of the Government. In spite of the shortage of men, machines and materials during the war, the food supply was increased in 1918 by 24 per cent compared with the decade preceding the war. Farmers could not be expected to break up the pastures unless they were assured that the resulting grain crops could be remunerative. Hence the Corn Production Act of 1917 had to be passed guaranteeing minimum prices for grains. Under the Act, the landlords were prohibited from raising rents and taking undue advantage of the guarantee while the agricultural labourers were assured of certain minimum wages. The Agricultural Act of 1920 embodied the permanent peacetime policy of the Government for the rehabilitation of British agriculture. Under the Act, farmers were guaranteed minimum prices for grains; these prices were to be revised each year by a Commission according to the changes in the costs of production. The machinery to fix the minimum agricultural wages was retained. A tenant turned out of a holding by his landlord, unless on account of bad farming, became entitled to compensation. The Minister of Agriculture was empowered to take over cultivation of the land of the defaulting and inefficient farmers. The post-war boom proved to be a short-lived one. By 1922, the agricultural prices collapsed to half their level in 1920. The execution of the Act of 1920 would have, under these circumstances, involved the subsidization of grain producers on a scale the Government could not afford. In 1921, the Corn Production Act was repealed and the guarantee of minimum prices for grains and minimum wages for agricultural labour was withdrawn. The policy of *laissez-faire* was thus once again restored.

The agricultural prices remained steady between 1923 and 1925 and thereafter experienced a slow decline till 1930 when they were accelerated by the world economic depression. In 1933, the agricultural price index was only six per cent above the pre-war level. The general price level, however, fell more steeply than agricultural prices; in other words, the purchasing power of agricultural produce in terms of other commodities was greater than in 1920. On the other hand, the cost of wages has been, since 1925, much heavier than before the war both absolutely and relatively to agricultural prices. In 1933, for example, the money wages of the farm worker were about seventy per cent greater than in 1914 while the agricultural prices were only six per cent greater than in 1914. As the labour costs are the heaviest in arable farming, the rise in wages has resulted in a decline in the arable acreages and the consequent decline in the agricultural population. The Agricultural Wages Act of 1924 restored the state regulation of agricultural wages and helped the agricultural labour in the decade that followed to narrow the wide gap that existed in 1924 between his standard of living and that of the town worker. During the decade that followed, *viz.*, 1925-34, there was recorded an increase of nearly forty per cent in the productivity of the average farm worker. Mechanisation of farming and the striking progress in agricultural technique and in the arts of husbandry mainly account for this increase.

While the output of arable products continued to decline since the war, those of dairy produce, poultry and eggs, vegetables, glasshouse and horticultural produce, continued to increase. Meat section of the livestock industry remained the most important branch of British agriculture. In 1930-31, the value of its output was 32% of the total agricultural output in Britain. In 1903-13, Britain produced at home about half her total meat requirements but in 1927-31, this percentage dropped to 41 owing to the continued expansion of imports and the slightly curtailed home output. In 1933, the meat imports were regulated and in 1934, provision for cattle subsidy was made with the result that the production of meat in Britain rose from 22.9 million cwt. in 1927-31, to 25.8 million cwt. in 1935-36.

In 1913, one-tenth of the area of agricultural land in

Britain was farmed by the owners; in 1921, the proportion was doubled and in 1927, it shot up to 36%. This rise can be accounted for by the anxiety on the part of the landlords to sell rather than by the desire on the part of the tenants to become owners of their holdings. The heavy burden of taxation since the war, especially in the form of estate duties, resulted in the break-up of landed estates and the consequent acquisition of holdings by the tenants. This extension of occupying ownership had the effect of exposing an increasing section of the farmer class to more extreme fluctuations of fortune than they would otherwise have experienced; for the traditional function of the landlord in Britain included not only estate management and provision of fixed capital but also protection of the tenant from the worst shocks of agricultural depression by remissions or abatement of rent in hard cases. Moreover, the purchase of the land naturally resulted in a depletion of the finances at the disposal of the farmer and the problem of agricultural credit became more urgent. The first Agricultural Credit Act was passed in 1923. It authorised the Public Works Loan Commission to make long-term loans to farmers who had purchased their land while the Corn Production Act was in force between 1917 to 1921. This facility was extensively used by the farmers. The second Agricultural Credit Act was passed in 1928. It sought to make the joint stock banks the principal channel through which farmers could obtain both long-term and short-term credits. It established the Agricultural Mortgage Corporation whose share capital was held by the Bank of England and the principal joint stock banks. The Treasury advanced a sum equal to the share capital, *viz.*, £6,50,000 free of interest and contributed partly towards the annual expenses. Applications for loans had to be submitted through the joint stock banks and loans on mortgage were made for periods up to sixty years. The credit facilities provided by the Corporation have been extensively used. The Act also authorised the farmers to obtain short-term loans from banks on the security of fixed or floating charges on farm estates. The short-term loans have not, however, been as popular as the long-term ones as credit from other channels as well is available on similar terms. The co-operative credit societies have not made particular headway but success in other forms of agricultural co-operation has been a conspicuous one. The Agricultural Organisation Society formed in 1900 led the movement for extension of co-operation in agriculture. In 1923, when its functions were taken over by the National Farmers' Union, there were over a thousand co-operative trading societies, with about 1,45,000 members and sales of nearly twelve million pounds. In 1936, the number of societies was reduced to a half, with the membership declining to 1,38,000 but the sales recorded a rise to over sixteen million pounds. Slightly more than half of these sales comprised of farming requisites like seeds, manure and utensils required by the members, the remainder being the sale of farm produce. In the field of co-operative marketing, not much headway is made. The absence in Britain of a concentration of small holdings comparable to that on the continent of Europe, the individualist tendency of the farmer and the absence of export markets for British agricultural produce are some of the important factors that account for this development.

## STATE AID TO AGRICULTURE

The thirties of the present century mark the beginning of a new phase in the development of British agriculture, the substitution of a positive state policy in relation to agriculture in place of the predominantly *laissez-faire* view that held the field from 1846 to 1931. The new policy aimed at making British agriculture more profitable and less subject to fluctuations in prosperity. Home production and imports had to be regulated to prevent gluts and to maintain agricultural prices at remunerative levels. To achieve these objectives, measures relating to tariffs, import quotas, subsidies, regulation of home production and the fixation of prices had to be adopted. The first such measure was the Agricultural Marketing Act passed in 1931. It authorised the establishment of a compulsory scheme for controlling the marketing of any agricultural product. The Act did not, however, regulate imports or total home sales. The second Marketing Act that followed removed this defect. The two Marketing Acts enabled the formation of marketing boards elected by the producers. The boards were granted extensive powers including those required for the regulation of production, the fixation of prices and the grading and transport of a product. By 1939, marketing schemes were set up for milk, pigs, bacon, hops and potatoes. The Hops Marketing Board attained a strong monopolistic position and was aided by a fifty per cent *ad valorem* tariff. The Pigs and Bacon Marketing Boards were established in 1933 and the quota system was made applicable to the import of bacon. This resulted in a curtailment in imports which in 1932, formed ninety per cent of the requirements of the country. It also led to an expansion of home production and by 1936, one-third of the bacon requirements were produced at home. The Milk Marketing Boards fixed the terms of contracts between producers and distributors and the minimum prices at which the distributors may resell. As the scheme was successful in maintaining a remunerative price for milk, the farmers were encouraged to increase their output of milk. The Milk Marketing Boards undertook the publicity campaign as well to stimulate demand for milk and to prevent a collapse in the level of price of milk. In 1932, the Wheat Act was passed permitting subsidy to be paid to the farmer to bridge the gap between the average sale price of wheat in a given year and the standard price of ten shillings per cwt. Between 1931 and 1937, the acreage under wheat thus rose by 47%. This rise was, however, at the expense of oats and barley; hence the Agricultural Act of 1937 provided deficiency payments for the growers of oats and barley when their market price dropped below eight shillings per cwt. The livestock industries were also helped through the period of depression by import quotas and subsidies. Under the Ottawa Agreement of 1932, imports of beef, mutton and lamb were reduced by one-third. The Cattle Industry Act of 1934 provided for the payment of a subsidy at the rate of five shillings per cwt. for live animals and nine shillings four pence per cwt. for carcasses. During the three years, 1934-37, more than eleven million pounds were paid in subsidy to the cattle producers. The Livestock Industry Act of 1937 differentiated between home-bred and imported animals in the grant of subsidies. In 1939, the guaranteed minimum price applied to wheat, oats and barley was extended to sheep as well. The thirties of the present century thus witnessed a complete reversal of the agricultural policy in Britain which for nearly a century had provided the industrial worker with cheap food. Agriculture came to be subsidised at the expense of the taxpayer and food made dearer to improve the standard of living in the rural areas and to reduce the dependence on overseas food supplies. Even in 1939, Britain was producing no more than a third of her food requirements; a third of the feed for the livestock was imported during the year. Even during the decade preceding 1939, the economic ability of the country to pay for the imports of food, raw materials and manufactured goods was becoming precarious; when the war came in 1939, the situation became graver still.

The years of war witnessed a drastic reduction of imports and a strenuous effort to increase food production. Commodities like rice, fruits and vegetables were removed from the import list. The imports of animal feed also dwindled to a mere trickle; the number of sheep, hogs and hens fell sharply and underfed cattle yielded less milk. In spite of the demand for land, for camps and airfields, the ploughed area was increased by over sixty per cent. The use of machines and tractors grew greatly, drainage schemes were pushed to completion, inefficient farmers were forced to mend their ways and a million and a half garden plots were tilled by civilians in their spare time. These measures enabled the country to increase the output of human food by over seventy per cent and to meet about seventy per cent of her very austere ration requirements. In spite of these efforts, however, twelve million tons of food had to be imported in 1943 and they could not be paid for by exports of goods or services. The sale of foreign securities, shipments of gold, borrowing and lend-lease solved or shelved the problem of payment during the period of war but when peace came, a grim situation had developed and had to be faced. The former creditor nation had now become a debtor, buying power had been seriously depleted, the merchant marine had been damaged and the surviving ships could not be quickly released for civilian service. A fever drive to rebuild the export trade had to be launched and rationing had to be made stricter still. It was apparent that the task of obtaining, through exports of goods and services, sufficient foreign exchange to pay for food imports comparable to those of former times was going to be a hard one.

## RUSSIA

*A Historical Review.* The practice of serfdom prevailed in Russia until the sixties of the last century. It was in 1861 that the Edict of Emancipation liberated the serf from his lord. The serfs divided their time between cultivating their landlord's domain and tilling their own share of the village land. The serf was not so much an individual as a member of the *mir*, a village community. The village council shared out the arable fields in strips among the families, controlled farming practices and regulated rotation. Even after the emancipation of the serfs, the *mir* retained control over half of the land and could rent or buy it. By 1880, eighty five per cent of the peasants had bought the land in spite of the opposition from the nobles and in 1881, the purchase by the peasant was made compulsory though at reduced prices. As the population increased by over eighty per cent between 1861 and 1900, there was a diminishing share of land made available to the peasant; the average holding which extended to about eleven acres in 1861 was reduced to just seven acres in 1900. To secure foreign credits with which to pay creditors or to buy capital goods, grain was forced into the export market, there to compete with the American grain at ever-falling prices. To build railroads and to subsidise the growth of industries, Government was spending vast amounts during the nineties of the last century. Borrowings abroad by the Government for this purpose meant an increased annual interest charge. Agriculture was thus subject to a strong influence of the export market. The large grain exporters thrived on the poverty of the mass of the peasants. The farmers had to sell the grain immediately after the harvest at low prices in order to acquire cash with which to meet their taxes and to meet the debts incurred in the previous sowing period. The average standard of life was low on account of the low productivity of agriculture which constituted the livelihood of four-fifths of the total population. The proportion of the total land that was cultivated was small, being no more than twenty-five per cent even in European Russia. The average area of cultivated land per head of the agricultural population worked out at a figure of only about three acres; the average yield per acre of arable land in European Russia being no more than eight to ten bushels. The main reason for the low yield was the primitive character of farming technique. The three-field system was common in most parts of the country and necessitated one-third of the arable area lying fallow every year. A farmer's land was often held in small scattered strips. The available pasture was insufficient; there prevailed chronic deficiency of capital among all peasants except a thin upper stratum. There was extensive social differentiation among peasants themselves; in 1905, the richer ten per cent of peasants, each possessing more than 55 acres of cultivated land, owned about 35% of all land while half of all peasant households had holdings of less than twenty-two acres and occupied just over a fifth of the total area. The poorer peasantry had to seek additional earnings either by working for wages or by undertaking domestic handicraft industry. The rich Kulak employed about half of this casual wage labour. In 1906, a decree was issued to the effect that any villager could withdraw his holding, into a separate farm, separate from the *mir*. By 1916, forty per cent of the holdings were so withdrawn and about ten per cent of them were consolidated chiefly by the dissolution of the *mirs*. In 1914, four-fifths of the arable land in European Russia was peasant property. Agricultural co-operation also spread quickly. In 1913, there were thirteen thousand societies of farmers with a membership exceeding eight millions. Russia led the world as a grain exporter; cereals and other food-stuffs accounted for over a half of her total exports in 1914 while raw materials and semi-manufactured goods constituted 36% of the total. On the other hand, manufactured goods made up a third of the total imports and raw materials and semi-manufactured goods accounted for nearly a half. Prior to 1914, the import tariff was so graded as to impose a prohibitive rate of duty on most foodstuffs; the average level of duty on industrial raw materials and on manufactured goods was, on the other hand, relatively low.

The land Decree issued by the Government immediately after the 1917 Revolution stated that the landowners' right to possession of the land was abolished without compensation. Land was declared to be held in trust; it could not be bought, sold, leased or bequeathed. Private property in land was thus abolished. In the years that followed, the surplus produce of each farm, over and above the essential needs of subsistence and seed-corn, was subjected to compulsory requisitioning. The Commissariat of Supplies organised the collection of this surplus and allocated it between the army, the industry and the main distribution centres for workers' rations. The peasants' co-operation was not, however, forthcoming and there was a shrinkage in the sown area. At first, the obligation was imposed on the farmer to hand over the whole of the surplus produce above a minimum necessary for his family. This, however, proved to be subject to widespread evasion. It was, therefore, replaced by purely arbitrary levies imposed by the local collection department. This system no doubt saved the towns and the armies from starvation during the Civil War but it could serve no more than an emergency method of supply. In return for the produce handed over to the state, the peasant was to get manufactured goods. The price of manufactured goods had, however, risen much more than the price of agricultural products; the terms of exchange between industry and agriculture had worsened between 1919 and 1920 and the villages received not more than twenty per cent of their pre-war supplies of manufactured goods. To win over the peasantry and to revive the exchange of products between town and village, it was necessary to abolish the system of requisitioning and to replace it by an agricultural tax in kind. This was done under the New Economic Policy of 1921. After the payment of this tax in kind, the peasant was free to consume the rest of the produce or to sell it in the domestic market. Under the New Economic Policy, agriculture thus remained stubbornly individualistic. It consisted mainly of small-scale production by individual working-owners. Much of it was subsistence farming rather than farming for the market though Kulak farming for sale with the aid of hired labour was allowed. Only a very small area was covered by state and collective farms. The next two years recorded recovery in agriculture and in 1923, the gross production of grain recovered to more than seventy per cent of 1916. Industrial recovery was, however, comparatively slower; this was one of the important factors that led to the widening of the 'price-scissors', the terms of trade moving very much in favour of industrial goods. The other factor was the limitation of competition between industrial organs and the grant of a greater degree of control over the market to state industry which thus acquired a monopoly position, restricted the sales to the village market and turned the terms of exchange in its favour. In 1924, the policy of lowering industrial prices was adopted; pressure was exerted on industrial organs to reduce prices. Efforts were also made to raise agricultural prices by an altered price policy in grain purchase, by more liberal credits to grain purchasing organs and by the development of grain export. The career of the depreciated paper rouble was brought to a close by the introduction of a currency reform. These measures had the desirable effect of closing the 'scissors', and although a certain margin persisted between the levels of prices of industrial and agricultural prices, it was one which presented no serious difficulties whatsoever.

In 1925-26, the gross production of grains had almost reached the pre-war level, being nine-tenths of 1913 but the marketed surplus of grain was less than one-half of the pre-war amount. It was estimated that only seventeen per cent of the total yield was being sent away to market by the peasantry. The reason for this deficiency in the marketable surplus was to be sought in the very character of the agrarian revolution of 1917. In pre-war days, the large estates and the Kulak farms accounted for nearly three-quarters of all marketed grain. Since 1917, the estates were abolished and as producers of grains, the Kulak farms retained only a third of their pre-war importance. The poor and middle peasants who were formerly mere subsistence farmers were now better off, accounted for more than eighty per cent of the grain production, and were themselves consuming more of what they harvested from the fields, thus leading to a reduction in the marketable surplus.

## Soviet Agriculture And The Five Year Plans

Co-operative production was the very basis of the First Five Year Plan. Agricultural co-operation, until 1928, had been predominantly in the sphere of credit and trade but not of production. The collective farm movement was now to be launched. Even prior to the adoption of the first Plan, a similar form of co-operative farming known as the *artel* did prevail. Under this form, the members had their land and implements in common though they had their own dwellings and gardens; they farmed collectively and shared out the crop. This form was suitable for the use of modern mechanised methods of cultivation. The aim of the collective farming movement was to supply adequate agricultural produce to an expanding industry and an increasing population. As the movement was not expected to develop within a short span of time, the First Five Year Plan laid down the target of embracing a quarter of all peasant households and about fifteen per cent of the cultivated land by 1933. A programme of establishing large-scale state farms was also launched. By 1933, the state and the collective farms were expected to provide one-fifth of the total grain crop and two-fifths of the total marketed surplus of grain. In the first two years of the Plan, the supply of marketed grain from state farms exceeded the 1933 target, hence the original target was doubled. The opening of the calendar year 1930 saw a figure of four million peasant households as the number in collective farms, that is, two-thirds of the 1933 target. The targets for the sown area and production of state and collective farms were,therefore, revised and more than doubled. The villages were to merge their holdings, implements, animals, seed and farm buildings in one great farm unit, the Kolkhoz or the Collective Farm, and to operate it collectively working in brigades under the supervision of a local official who in turn was responsible to the higher authorities. The tractors and machines required for cultivation were to be obtained from the tractor stations dotted in the country-side. In return for this aid and for the manufactured goods, the Kolkhoz was to hand over its surplus produce to the state. This movement inevitably involved antagonism with the Kulaks, the richer stratum of the peasantry. For them, this new category of large-scale farms preferentially treated with regard to credits, machinery and forward purchase contracts presented a serious menace. The middle and smaller peasants submitted but the opposition of the Kulaks became more and more pronounced and violent. In the second year of the first Plan, the property of the Kulaks who opposed was expropriated and the class of the Kulaks was virtually eliminated. The collectivisation campaign meant the loss of the individual ownership of the property of the peasants, including the property in the form of livestock. Large-scale slaughter of livestock, therefore, took place as a reaction of the Kulaks and the middle peasantry whom they won over, to the collectivisation campaign. By 1932, the number of cattle fell by more than a third of the 1929 level. Even by the end of 1939, the 1929 level was not reached. Apart from the disastrous effect of this slaughter on the supplies of meat, hides and dairy produce, it caused a gap in the animal power required for cultivation. The success of the collectivisation campaign was thus checked; the two bad harvests of 1931 and 1932 were a further handicap. In spite of these difficulties, however, the main achievements of the collective farm of agriculture during the first Plan was the substantial increase in the marketable surplus of grain, potatoes, cotton, flax and wool. The collective farm was granted certain preferences like the exemption of all animals and livestock from tax for two years, favourable terms of credit and priority in the allocation of manufactured goods in scarce supply. The individual farmer, on the other hand, enjoyed no such privileges. By 1932, fourteen million peasant households had become members of collective farms; two-thirds of the total sown area came to be cultivated under this system while the original target for the first Plan was only one-seventh. The important rôle played by the state and the collective farms can be judged from the fact that they supplied 84% of the marketed surplus of grain. In 1932, the state farms covered one-tenth of the total sown area of the country; their average size was about six thousand acres. They had, however, fallen short of expectations in respect of yield and total production; they were found to be too unwieldy for efficient management, and too specialised in character. Steps were, therefore, taken to reduce their size, to abandon extreme specialisation, and to improve the yield. In the second Plan, in fact, there was made a certain reduction in the total acreage of state farms in favour of collective farms. Mechanisation was a special feature of collective farms and this did result in higher productivity per man-hour of labour, thereby releasing man-power for migration from agriculture into industry. It is estimated that productivity per head in agriculture rose by about sixty per cent between 1928 and 1939.

Under the Second Five Year Plan, collective farms made further progress. The decree in 1933 made it compulsory for the collective farms to follow the system of forward contracts. Under this system, Government had fixed buying prices for the quotas which were to be sold by the collective farms in a particular period. As these buying prices were lower than the market price, delivery quotas meant a form of tax in kind. Deliveries as a percentage of gross yields averaged 32% in 1931 and 20.5% in 1934. The collective farms had the right of free trade in produce left after the sale of the quota was made. This system of compulsory deliveries gave to industry and to the towns a guarantee of a certain minimum supply of agricultural produce. It was thus possible to make certain plans in the industrial sector. This system also gave stimulus to the farmer to raise the size of the crop, as he was completely free to deal in the produce in excess of the delivery quota. The greater mechanisation released labour from agriculture and resulted in a decline in the rural population by five per cent between 1926 and 1939; it is estimated that about twenty millions migrated from villages to urban areas whose population was doubled during this period. The reduction in the number of mouths to be fed in the villages also contributed to an increase in the marketable surplus of agriculture which in the case of grain in 1938 was at least twice of what it had been in 1928. Between 1934 and 1937, Mr. Colin Clark has estimated a rise of nine per cent in food consumption per head; in the case of non-foodstuffs, he estimated the rise for this period to be thirty per cent. There was thus considerable improvement in the food position and in the supply of consumer goods. The per capita supply of foodstuffs was, however, well below the standards of countries in West Europe and of the U.S.A., grain being a notable exception.

The Third Five Year Plan was seriously affected by the outbreak of the war. Some of the richest agricultural lands in the south were occupied by the enemy. The country thus lost nearly a half of her grain lands and big population and almost the whole of her sugar-beet. With the advance of the Red Army in 1943, however, plans for the revival of cultivation were made. Collective farms and tractor stations came to be re-established; loans were granted for purchase of seed and dwelling houses. During the war years, attempts were made to extend cultivation in the east. During the war period, young men joined the army and more than forty per cent of the labour force devoted to field work on farms was lost; male workers were replaced by women and children. In the unoccupied areas, attempts were made to extend cultivation of wheat, beet and vegetables while in the neighbourhood of all large towns market-gardens came to be raised. Even in 1945, after the conclusion of the war, only a fraction of the pre-war productive capacity of the devastated regions could be restored. The serious drought in 1946 in the Ukraine and the Volga region made matters worse. In the Fourth Five Year Plan, as was to be expected, great emphasis was laid on the task of restoration in the devastated regions. The targets for agriculture were, however, much more modest than those for industry. The target for grain harvest for 1950 was just seven per cent higher than the production in 1940. For the industrial crops like beet, cotton and flax, the percentage increase of the target exceeded twenty per cent. During the war years, attempts were made to save the animal population by evacuating them towards the east, but the losses suffered in this respect were indeed very grave; hence a higher target was laid down for this item as well.

## GERMANY

*A Historical Review*. The dawn of the present century witnessed Germany emerging as one of the peasant proprietor strongholds of Europe. In 1907, 93% of the farms covering 32% of the agricultural area were owned by their cultivators. The peasants were predominant west of the Elbe while the politically powerful cultivating squires, Junkers as they were called, held sway over the lands east of the Elbe. During the four decades ending in 1911, in Prussia nearly fifty million acres owned by two and a half million persons were consolidated. The process of consolidation continued in the decades that followed and the Government encouraged it. It led to a reduction in production costs and an increase in output.

Germany led in beet production and grew in 1914 a third of the world's crop. Russia and Austria-Hungary were the rivals for the second place. After the first World War, however, Great Britain, one of the chief markets for German beet-sugar encouraged her farmers to grow beet by providing bounties on production and raising tariffs. The world output of sugar rose from less than fifteen million tons in 1913 to over twenty-five millions in 1930. Prices fell to lower levels while tariffs and quota blocked trade channels leading to a sugar crisis. In 1931, therefore, the harassed producers of beet and cane sugar signed the Brussels Convention and agreed to limit or to reduce their output and to restrict exports for five years.

The rapid industrialisation in Germany during the last quarter of the nineteenth century resulted in attracting labour from the country-side to towns. This reduced the supply of unpaid labour on which family farming depends and to a rise in wages paid by the Junkers to labourers on farms. German agriculture was thus made subject to higher costs of production. Imports of cheap Russian rye made matters worse as two-thirds of the population ate rye-bread. Further, wheat and meat imports from America and Russia and wool imports from Australia created a difficult situation. The Junkers persuaded Bismark to abandon the free trade attitude; the tariff of 1879 gave moderate protection to them. The higher prices of the nineties gave a stimulus to land utilization which was continued in the decade that followed as well. The harvest of 1913 was nearly double that of 1890 in spite of little addition to the labour force. This was made possible by intensive cultivation, greater agricultural co-operation and greater use of fertilisers. In 1913, Germany bought a third of the export of nitrates by Chile. In the same year, the first factory was set up in the country to perform the miracle of taking nitrogen from air and fixing it in a chemical fertiliser. Till 1919, when she lost Alsace, Germany had a world monopoly of potash and she used half of her output at home. In spite of the advances made in agricultural production till 1913, the country produced no more than two-thirds of her food and fodder requirements importing the other third. During the first World War, her agriculture was put to a severe test. Supplies of food, seed, raw materials and fertilisers were seriously curtailed. Cultivation was also seriously affected by withdrawal of man-power absorbed in the army. Very austere rationing had to be introduced and meatless days were decreed. Lack of adequate labour force, fertilisers and equipment was very keenly felt. The war cost her a loss of a fifth of her rye lands, a smaller fraction of her wheat, barley and oat fields and almost the whole of her potash and phosphoric fertilisers. Alsace-Lorraine was annexed to France. Germany thus lost about one-eighth of her rural productive capacity. She now had to import rye from the east and fertilisers from the west, paying for them from her export trade which was also dwindling. Schemes of rationalisation of agriculture were introduced; they implied greater mechanisation, improved seeds and fertilisers and study of marketing methods. Such schemes, however, proved very costly. Large amounts were borrowed from Britain and America at high interest rates. When prices fell in 1929, this load of new debt became crushing. The Bruning Government tried to relieve the distress by raising tariffs, pegging the prices above the general market level and lowering interest rates on mortgages, but the situation was too serious to be remedied by these measures and the Junkers were neither saved nor satisfied. In 1932, the Bruning Government was overthrown; within a few months, the Nazi regime commenced and state control over the agricultural sector was made complete to achieve the goal of self-sufficiency at all costs. The prices of wheat and rye were raised above the world price and interest rates on farm loans were lowered. An inheritance law was passed making land holdings above a certain size inalienable; this protected the medium and the large estates but not the small peasant. The farmer was relieved of high interest costs, secured higher prices for his produce and, therefore, began to feel better. The goal of self-sufficiency could not, however, be attained; food for man and fodder for cattle had to be imported. Even in years of good harvests, the country could barely produce enough cereals to meet the requirements. The eviction of adolescents and of married women from their jobs and the removal of Jews increased scope for employment of labour; unemployment was further reduced by starting more ambitious public works programmes, especially the construction of roads and buildings.

Germany was the first country to solve the problem of agricultural finance and the two methods evolved in Germany for this purpose, *viz.*, the land mortgage credit association and the Raiffeisen co-operative bank, were later on copied throughout the world. The German banking system of the nineteenth century was wedded to industry and commerce and paid scanty attention to the needs of the small farmer. This had the inevitable result of the small farmer relying on the professional moneylender or the produce merchant who charged very high interest rates leaving the farmer in a state of perpetual indebtedness. The first Land-schaft or the Land

Mortgage Credit Association was formed as early as 1770. Its bonds were backed by the entire property of its members; it lent member-borrowers up to two-thirds of the value of their property; it insisted on repayment of the loan by instalments; it would even take over the administration of the estates of the defaulting members. The Government appointed the higher officials and supervised the administration of the Association. The interest-rate on the bonds was low, varying from three to four per cent, while the borrower had to pay a little higher rate on his loan. The system became popular with the large landlords as well as the small farmers and spread to other countries as well. In 1916 and 1923, the land mortgage bonds were adopted by the Federal Farm Loan System as a means for raising funds.

The other German solution of the rural credit problem was the Raiffeisen co-operative bank. In 1849, Frederic Raiffeisen set up a very successful loan society with capital wrung from philanthropists. He was the burgo-master of a group of Rhine villages and had often witnessed the tragedy of the poor peasants losing their assets which were swallowed up by the exacting moneylender. In 1862, he persuaded the villagers of Anhansen to form a co-operative bank in which the people of the village could deposit their savings and from which the local farmers could borrow. Such co-operative banks became very popular and by 1905, about thirteen thousand of them were at work. Each member contributed only ten marks of share capital; he, however, accepted unlimited liability. Each bank worked for its village and considered applications for credit from the villagers. The decision to grant a loan depended on the personal character of the applicant and his ability as a farmer. The rate of interest varied between four and five per cent. The village co-operative bank could get loans from central co-operative banks and to a limited extent from the Government as well. The Raiffeisen Co-operative banks proved a great success. The principle of unlimited liability proved a sound foundation; the borrower's personal reputation and ability were good security and the operation on a non-profit basis, mainly by honorary workers, permitted a low interest rate. Gradually, the field of these co-operative banks came to be widened. Other services such as purchasing supplies and processing local produce came to be added to their original function of granting credits. By 1910, the country had seventeen thousand credit banks of the Raiffeisen or similar pattern with one and a half million members and an annual turnover of nearly 1500 million dollars and a record low figure of only nineteen failures since 1896. The inflation that came in the aftermath of the first World War resulted in wiping out the value of the mark and hence had disastrous consequences on the deposits and loans of these co-operative institutions. In the late twenties, however, recovery was recorded and by 1930, there was a membership of about four millions for about thirty-six thousand co-operative banks of this pattern. In addition to them, there was a large number of purchasing, processing and selling co-operative societies, resulting in one rural co-operative society for every 1600 inhabitants and for every 1800 acres of farm land.

# JAPAN

*A Historical Review.* The dawn of the present century witnessed a strong tendency towards urbanisation in Japan. By 1913, the proportion of the population found in rural communities with a population under 10,000 persons had declined to 72% while it was 84% twenty years previously. The progress of industrialisation accounted for this change. Agriculture was characterised by the small size of the average farm and concentrated mainly on the cultivation of rice crop. Much of the rice was grown in small terraced fields on account of the hilly nature of the country. An intensive system of cultivation was followed; labour was abundant but arable land was scarce and formed hardly fifteen per cent of the total area in 1910. In that year, over two-thirds of the farms had an area of one *cho* or under. (one *cho* = 2.45 acres). In Northern Japan, especially in Hokkaido, the larger farms were more common. After the Restoration, the peasants were freed from the feudal restrictions. By 1910, about one-third of the farmers were tenants, two-fifths were peasant proprietors and the remainder owned part of their land and rented the rest. Besides farming, peasants also engaged themselves in silk raising and to some extent in silk-reeling. During the three decades ending in 1913, however, in some measure, domestic weaving was replaced by work in small specialist work places and small factories.

The country experienced a rapid industrial advance between 1914 and 1929; nevertheless, manufacture engaged less than one-fifth of the occupied population while agriculture occupied as high a proportion as half. During this period, the number of farming families was practically stationary at five and a half millions. The change in the size-distribution of the farms was small; the number of farms of the area under one *cho* continued to account for seventy per cent of the total number, throughout this period. The system of land tenure had altered little; rice continued to be the main food crop grown and well over half the cultivated area was under it. The annual production of rice was only slightly above the pre-war average and the country came to rely more and more on imports of rice from Korea and Formosa to feed her rising population. The trebling of aquatic production during this period, however, helped the country in adding to her food production as the fishing industry supplied the country with her main foodstuffs. During the first World War, the price of rice rose to high levels but with the end of the post-war boom, the price collapsed from 55 yen a *koku* (one *koku* = 4.96 bushels) in January 1920 to 25.5 yen a *koku* in March 1921. The Rice Act was, therefore, passed which gave power to the Minister of Agriculture 'to adjust supply and demand' by storing rice when prices fell very low and selling it when prices rose high. A fund of two hundred million yen was provided for this purpose. The recurrence of poor harvests till 1927 resulted in the high level of the price of rice being maintained for a long period. The next four harvests were, however, much above the average, leading to the collapse in prices in 1930 to 18 yen a *koku*. The peasants were the worst sufferers; to add to their misery, the world depression affected their other main source of income as well, *viz.*, raw silk. In this connection, it may be noted that in 1927-29, Korea and Formosa, the two colonies of Japan exported to Japan quantity of rice equivalent to about fourteen per cent of her domestic production. These imports enabled Japan to meet the demands of her increasing population and to maintain a certain level of consumption per head. But such imports meant that the Japanese farmers gained little advantage from the rising demand for rice and certain sections in Japan, notably the Imperial Agricultural Society made a plea for restricting these imports. There was, however, obviously a strategic as well as an economic advantage for the country to encourage food production in her colonies.

The production of raw silk, the second most important agricultural product in Japan increased three-fold between

1914 and 1929. This meant a similar rise in the demand for cocoons as well as for mulberry leaves. In 1929, two-fifths of all farming families were engaged in raising cocoons. The reeling mills created a greater demand for female workers coming mainly from the peasants' families. The cash income of an average family of a farmer thus rose. Cocoon-raising requires much skilled labour but little capital resources and is thus eminently suitable as a form of secondary employment for the farmer in Japan. During the first World War, the price of silk rose and in 1920, the average export price per 100 kin rose to 1191 compared to the pre-war average of 800 to 900 yen. Although it fell in the post-war slump, it recovered quickly to 2,150 yen in 1923. After 1925, with the rise in the exchange value of yen, it fell again and was 1420 in 1929. The world depression had disastrous consequences on the level of the price of silk which fell to 390 yen in 1932, thereby curtailing very seriously the cash incomes of the farmers already much depressed by the collapse of rice prices. The distress of the agricultural community in the main, led to the overthrow of the then Government and the transfer of the power to those who favoured military aggression.

The gold standard was abandoned in 1931 and the depreciation of yen took place. After the fall of the Minseito Government, Mr. Takahashi, the Finance Minister proposed to follow a policy of reflation. The policy meant an increase in governmental expenditure, financed almost entirely by borrowing, easy credit conditions and cheap money policy. After the introduction of this policy, the index of industrial production rose from 91 in 1931 to 149 in 1936, taking 1931-33 as the base. The greater part of this increase consisted of munitions and capital equipment for industry rather than of consumer goods. Agriculture, however, remained in a depressed condition; even in 1936, raw silk prices were only a little above the 1932 level and just a little more than half of those in 1929. The price of rice did not recover until 1935 to the 1929 level. The continued depression in agriculture, therefore, meant migration of workers from agriculture to industry and from rural to urban trades. The higher degree of mechanisation and the technical improvements in the industries implied on the other hand a comparatively lower demand for workers; the inevitable result of such a migration of workers was, therefore, keeping down industrial wages. Reflation together with the depreciation of yen, however, enabled Japan to increase her production, to redistribute her resources by transference from agriculture to industry, to develop her foreign trade and thus to create conditions of full employment. As her resources were not already fully employed and as the depression in agriculture was chronic, reflation did not produce symptoms of inflation. By 1936, recovery had thus been achieved and Mr. Takahashi was of the opinion that the process of reflation should now be put to a halt. The Army was not, however, amenable to the proposition; a conflict broke out and Takahashi was assassinated in 1936. His successor continued the policy of reflation. By the end of 1936, however, symptoms of financial strain began to appear; a rise in the wholesale prices was recorded, the export trade no longer expanded at the same rate as before and the yen showed signs of weakness. In 1937, therefore, exchange control was tightened. The year saw the outbreak of war with China and the economy was placed on a war-time footing.

## STATE AID TO AGRICULTURE

Before we make a brief review of the post-war period, we would refer to certain developments up to 1937 in the field of agricultural finance and State aid to agriculture. Even in the very early years of the Meiji era, as early as the seventies of the last century, the State took an active interest in agricultural improvement. Agricultural Colleges were established and agricultural experimental stations were set up to assist in the adaptation of foreign crops to Japanese conditions and to work out improved methods of farming.

In 1896, a law was passed setting up the Hypothec Bank of Japan with a capital of ten million yen. The bank was empowered to make loans, redeemable by annual instalments within 50 years, on the security of immovable property such as paddy fields, salt fields, forests and fishing waters. The bank was also authorised to make advances without security to public authorities, co-operative societies and fishery guilds. To obtain further funds, the bank was authorised to issue debentures to an amount not exceeding ten times—later this was raised to fifteen times—its paid-up capital. It was also permitted to accept deposits which it had to employ in the purchase of national bonds and bills of exchange. For the first ten years of its existence, the Government guaranteed its dividends at the rate of five per cent. At this time, 46 Agricultural and Industrial Banks were also set up, one in each prefecture. Their business was similar to that of the Hypothec Bank and they acted as the local advisory bodies to this Bank. They were permitted to raise funds to the extent of five times their paid-up capital and they could approach the Hypothec Bank for advances. In other words, the Hypothec Bank acted as a kind of central bank for these local institutions. It supplied them with funds by taking up their debentures and it employed them as agents in making advances to its clients. The Government exercised close supervision over the business of these banks and granted them financial help as well. We have already referred to the guarantee of dividends given by the Government; in addition, the Government advanced a loan of ten million yen to the prefectural authorities to enable them to subscribe to shares in the Agricultural and Industrial Banks. In 1898, Government used 3¾ million yen of the Chinese Indemnity for the purchase of the debentures issued by the Hypothec Bank. The Hypothec Bank thus specialised in granting long-term loans largely to agriculturists and to small country manufacturers on the security of immovable property. It raised the amount of its loans of this type by two and a half times between 1921 and 1931 and played an important part in relieving the difficulties of the small country banks during the 1927 crisis. In 1921, banking consolidation took place and the Hypothec Bank began to absorb the prefectural Agricultural and Industrial Banks and to operate them as its branches.

During the two decades following the first World War, the Government disbursed large sums by way of subsidies for the benefit of agriculture. To maintain the prices of rice and silk in years of depression, financial help was rendered by the Government. The major portion of the subsidies went towards improvements in farm lands, rural drainage and water systems, in assisting tenants to acquire holdings and in relieving them in times of financial difficulties. Special measures for farm relief were adopted in the years of farm relief and large sums were provided for emergency relief works. A small portion of the subsidy consisted of grants to co-operative societies, guilds of small producers and traders and for certain export activities. Grants were also given in connection with the Export Compensation scheme. In 1931, the total disbursement of subsidies was 61 million yen, of which more than two-fifths went to agriculture. As the total disbursement represented only three per cent of the total budgeted expenditure of the Government, one can conclude that subsidies played a minor role in the economic development of Japan during this period. The Government attitude towards the rural classes was quite sympathetic and helpful during this period. Financial encouragement was given to the peasants' co-operative societies. With Government help, co-operative storehouses and fertiliser factories were also set up and the co-operatives gradually displaced merchants from several lines of rural trade. Government also made attempts to divert industry to remote rural prefectures. It granted active help to the raw silk industry during the period of depression by providing funds for valorisation and by passing laws designed to increase efficiency. In 1935, for example, it introduced a redundancy scheme. Under the scheme, the establishments of filatures and silk-merchant-ing businesses were controlled by the license system and the excessive capacity from the silk-raising and the reeling industries was to be removed. To relieve the silk-raisers from the financial control of the large reelers, Government actively encouraged the establishment of co-operative reeling mills formed by the silk-raisers.

### The Post-War Period

As a result of the second World War, Japan lost all her overseas possessions including Korea, Formosa and Manchuria which were valuable alike as a market for her manufactured goods, as a source of raw materials and as an outlet for her surplus population. For about seven years till April 1952, Japan was under Allied Occupation; thereafter she became once again a sovereign nation. A notable reform took place during the period of Occupation. The system of land tenure was reformed so that 90% of the land came to be owned by the peasants themselves. During this period, the U.S.A. lent Japan about 1800 million dollars to rebuild her industries and to reopen her overseas trade. This period did record recovery in her industrial capacity but her pre-war export trade is far from being re-established. Her merchant fleet has just a third of its peak pre-war tonnage. Japan is deficient in many raw materials essential to maintain the basic industries, *e.g.*, iron ore, fuel oil, rubber and coal. Her economy is still essentially unstable; her mounting population now numbering 85 million poses a difficult problem especially as only about 17% of the land is arable. The land available per capita is thus just one-fifth of an acre. About 38 million people still rely on agriculture as their principal means of livelihood and their standard of living, is therefore, necessarily low. The present standards of nutrition are 80% of the pre-war level and the country has to import about four million tons of food annually to maintain even this low level. The pre-war Japanese Empire was, however, roughly self-sufficient in respect of food; rice from Korea and Formosa, soyabeans from Manchuria and sugar from Formosa made up the deficit of the home islands. The average size of a farm is less than two and a half acres. The great pressure of population on land has necessitated the intensive cultivation of the soil, the concentration on the production of rice, and the systematic use of supplementary irrigation. The small size of the farm, and the topography rule out any great use of mechanisation. Heavy application of fertilizers and the unstinted use of labour are the essential requisites for high yields. Concentration on grain crops, primarily rice, is necessary, as in a given area the caloric yield of these crops is by far the highest. Japanese rice yields are about the highest in the world; any further increase in home food production, therefore, lies in land reclamation of which, however, the possibilities are severely limited. There are plans to reclaim, during the next ten years, about four million acres of land and add them to the present acreage of fourteen million; it does not, however, seem to be feasible to dispense with the imports of food. At best, it may be possible for the food production to keep pace with the population increasing by about 1.5 million a year. In 1950, the production of all food crops was the largest on record being 30.9 million tons of which rice accounted for 9.7 million tons, sweet and white potatoes an equal amount and vegetables for 6.7 million tons. The total production for 1950 was thus eleven per cent larger than the average annual production for the period 1931-40.

Fisheries play an important role by supplying food as well as employment for the people. Japan's catch is the largest in the world. The limited arable area and the concentration of the population on the shores of productive seas have stimulated this development giving employment to over five million persons. The intensification of inshore fishing is, however, showing signs of over-exploitation and the Japanese are now forced to look to areas on the high seas and to foreign territorial waters to maintain their catch. The production including Antarctic whaling amounted to 8588 million lbs. in 1951 while the average for 1935-39 was 9259 million lbs; the corresponding figures for sardine and herring were 1,947 and 3,106 million lbs. respectively. Since 1945, Japan has lost the valuable fishing grounds off Kamchatka and the Kuriles which supplied the bulk of her exports of canned salmon and crab. Under the Occupation, fishing was confined to limited areas of the Pacific though annual whaling expeditions to the Antarctic were allowed. In 1952, Japan negotiated a Fisheries Convention with the U.S.A. and Canada. Under the Convention Japan is granted freedom to fish on the high seas but she has undertaken not to fish for salmon, halibut and herring in certain areas of the conservation off the North American Coasts.

In Japan, animal products derived from live-stock comprise a negligible proportion of the food consumed, *viz.*, one per cent. The whole domestic output of food in 1950, including the indigenous production of fish and animal products, could meet only about 85% of the needs of the population. Japan is thus, faced with the problem of balancing her imports of food and raw materials essential to her basic industries with the exports of her manufactured products; the loss of her colonies has been a serious handicap to her in the solution of this problem.

## THE UNITED STATES OF AMERICA

*A Historical Review.* The first World War brought conditions of an inflationary boom in the country; the foreign demand for manufactures and agricultural produce brought immense profits to corporations and high prices to farmers. Agricultural production was greatly expanded. The prices of goods which the farmer had to buy had not risen as quickly as those of the goods he sold. This prosperity had the natural effect of encouraging the purchase of farms and of pushing up the price of agricultural land. Several farmers raised large amounts in the form of loans from the banks by mortgaging their property in order to buy further landed estate. As long as the farm prices were at their 1919 and 1920 levels, this new debt burden was easy to bear but it became serious to bear it when prices fell during the years that followed. During the Great Depression, it involved a large part of the agricultural industry in bankruptcy. The volume of agricultural debt doubled itself between 1914 and 1920 and proved to be as disastrous to the banks in the rural areas as to the farmers themselves. It did not prove to be a wise policy on the part of the rural bankers to accept mortgages on land at inflated prices. Even as late as in 1934, the rural banks were trying to liquidate the bad debts incurred in 1919 and 1920.

The war and the post-war boom in agriculture made it difficult for the producers to compete in the international market. In wheat, cotton and tobacco, the country's position of dominance came to be challenged. Manufacturing industry was, however, in a healthy position with few commitments and large reserves and the stagnation in the rest of the world gave great opportunities for lending abroad and winning overseas markets. Between 1919 and 1929, a remarkable development in industrial technique took place; production per wage-earner in manufacturing industries increased by more than forty per cent. The large incomes earned by holders of stocks and of corporate property, however, proved to be an unbalancing factor in the expanding economic structure. The expectancy of higher profits combined with the increased facility for investment and the purchase of securities led to an immense expansion of credit. The inflow of gold from Europe and the action of the banks aggravated the process. America had emerged as an international creditor after the first World War. The action of the banks was, however, a more important factor. It was the object of the Federal Reserve policy of 1920 to rid the bank of Government bonds and to encourage the investment of banking funds in assets of a commercial nature like bills of exchange and short-term industrial advances. The banks, however, were reluctant to carry out the second part of this policy partly because there was a shortage of this type of assets and partly because they could earn higher profits in other ways. The banks, thus, followed the policy of investing funds in long-term bonds and in mortgages and extending credit to individuals and corporations for the purpose of buying securities. The credit thus extended was secured by the securities bought. This process was obviously a cumulative one and resulted in an ever-increasing volume of credit on the one hand and an ever-increasing demand for securities on the other. The prosperity of the investors led to increasing savings which in their turn found their way into the stock market. The banks depended on the maintenance of existing security prices for the cover for their loans and these security prices dropped in 1929 and a dangerous situation arose.

Another factor which made the economic expansion of 1922-29 an unstable one was the lack of balance in it; thus there was an excessive increase in the output of capital and durable goods as compared with non-durable consumption goods. There was brought about a relative redistribution of income in favour of the big corporations and the middle classes at the expense of the wage-earner and the farmer. The economic expansion would have been more stable if the industrial unskilled labour had been better organised and if wages had increased more and profits less. The urban prosperity, no doubt, created an increasing demand for farm produce; by 1929, the relation between the prices of goods bought and sold by farmers was near the 1909-14 level and the farm production was about fourteen per cent higher than in 1922. But this improvement was not sufficient to do much to alleviate the burden of debt which had been contracted during the years of high prices and for the farmer, this was a period of a constant struggle against prosperity. On account of the difficulty of liquidating agricultural debt, over five thousand rural banks had to suspend their business during this period. To help the farmers to receive credit on more liberal terms, the Federal Farm Loan Act had been passed in 1916 and the Agricultural Credit Act of 1923 provided further Federal aid to the agricultural producers. It could not, however, then be realised that American agriculture had a long period of contraction ahead of it and that the extension of production on the basis of further credits would heighten the difficulties rather than alleviate them. The burden of agricultural debt in 1929 was, thus, twenty per cent higher than what it was in 1920 and two and a half times as great as in 1914. Another scheme of the Government also did not bring any success. In 1929, the Federal Farm Board was set up under which the Government undertook to finance the purchase of wheat and short staple cotton and to store excess supply. The creation of such a surplus, however, meant a fall in prices in 1930 and the scheme had to be given up. The depression in agriculture had thus, an unbalancing influence on the whole system.

Even prior to the stock-market crash in October 1929, a fall in general production had started in June 1928. Excess capital equipment had led to a decline in profit prospects and it had become more and more difficult to sell the products of the factories. When it was realised that the existing prices of securities were far out of line with probable earnings, a swift fall in their level followed. This fall continued until June 1932, when common stock prices averaged about one-tenth of what they had been at the peak of the boom. During the boom, vast quantities of securities had been bought on money borrowed from the banks and these bank loans were covered by the securities themselves. When the crash came, bankers asked for extra cover for their loans and as this was not forthcoming, they sold the securities to recoup themselves, thus lowering their prices still further. All kinds of securities, stocks, bonds, real estate mortgages and loans were affected by this trend leading to the suspension of banks on a mass scale. Buyers were few and far between while sellers predominated; industrial stagnation, falling profits and rising unemployment were the logical sequence of such a situation. The wage-earners and the farming classes had to bear the full brunt of the falling prices. Agriculture had never fully recovered from the fall in prices in 1921 and the Great Depression brought it to bankruptcy. Being the least protected of all industries and poorly organised, it had to bear more than its full share of the general depression. Between 1929 and 1932, while the prices of goods bought by farmers fell by thirty per cent, the prices of goods sold by them fell by sixty per cent. The farm wages fell by 45% during his period while the total cash income from farm crops fell by over sixty per cent. As prices fell, the burden of agricultural debt grew heavier and heavier.

## THE NEW DEAL

President Roosevelt entered on his term of office in 1933 under dramatic circumstances; for three and a half years, the American economic system had been steadily decaying and had been brought to the verge of collapse. One of the principal aims of the recovery policy of the Administration was the restoration of agriculture. Agriculture provided a direct livelihood for about one-quarter of the population. It is essential that agriculture should be in equilibrium with industry. By 1933, American agriculture was suffering from a shrinkage of both its external and internal markets in the face of a steadily growing production. The curtailment of industrial production and the consequent unemployment meant a loss in the purchasing power of the industrial wage-earners; the effective demand for the farm products thus declined. The falling off of the export trade could not, therefore, be compensated for by the extension of market at home. The prices of the agricultural produce, thus, tended to sag and the ensuing fall in the purchasing power of the farmers brought about in its turn a shrinkage of the market for industrial goods. To raise agricultural purchasing power, the Agricultural Adjustment Act was passed in May 1933 under the New Deal programme. The aim of the Act was to restore the purchasing power of the farmer's income taking 1909-14 as the base period. The farm prices were thus to be raised to a point which would guarantee to the farmer a fair share of the national income. The Act proposed two methods to achieve this end : a system of voluntary contracts to reduce crops accompanied by benefit payments and a scheme for marketing agreements and licenses. For certain basic commodities like corn and hogs, wheat, cotton, rice and tobacco, the former method was the more important, the latter playing a subordinate role. For other commodities, such a direct production control was not exercised and reliance was placed on market agreements and licenses. In respect of corn and hogs, for example, the Administration spent in 1934-35 over three hundred million dollars in benefit payments and purchases. The benefit payments were intended to bridge the gap between the current average farm price and the 'fair exchange value' of the commodity. By 'fair exchange value' is meant the price which would give the commodity an exchange value in terms of industrial products equal to that which it had in the years 1909-14. A referendum of the farmers in October 1935 gave a vote of 86% in favour of a continuance of the scheme. The AAA policy did have a desirable effect; whereas in March 1933, both the farm prices and the farm-industrial price ratio stood at 55% of the pre-war level, in December, 1935, they stood at 110 and 90 respectively. The cash income of the farmers has also been estimated to have increased by over sixty per cent between 1932 and 1935. It was also an objective of the AAA policy to grant relief to the farmers half of whom were weighed down by mortgages. The refinancing of mortgages at lower rates was carried on by the Federal Farm Mortgage Corporation and the Farm Credit Administration. In 1933-34, the indebtedness of the farmers was thus reduced by about twenty-five per cent. The Frazier-Lemke Mortgage Moratorium Act, enacted in June 1934, was declared unconstitutional by the Supreme Court in May, 1935. In and after 1934, the renewal of the rural demand for industrial products began to be more marked. In appraising this improvement, however, we should do well to remember that it was brought about by the reduction in debts, the introduction of doles and benefit payments and by conditions of drought and disastrous crops in 1934. Further, along with the increase in farm prices, a rise in the prices of industrial products was also recorded partly due to the AAA's processing taxes, partly to increased costs brought about by the NIRA and partly by the desire of the manufacturers to secure increased profits. It thus became difficult for the Administration to restore the pre-war parity between farm and industrial prices without an even greater restriction of agricultural production than had been carried out. The Administration, however, claimed to follow a policy of planned abundance rather than of restriction and in 1935, both acreage and production were allowed to expand; this was inevitable after the disastrous crops of the preceding year.

In May 1935, the Supreme Court declared the NIRA to be unconstitutional; in the following month, therefore, an AAA Amending Act was enacted to extend the powers of the Administration and to give them further legal bulwarks. The Amending Act legalised all contracts previously made; it permitted the expenditure of thirty per cent of customs receipts under tariff laws for farm purposes, extended the Cattle Purchase Act, authorised the Government to acquire agricultural commodities pledged as security for Government loans and to hold them in reserve so as to tide over periods of shortage and to prevent undue price fluctuations. The Amending Act also provided that should the AAA be declared as unconstitutional by the Supreme Court, only those payers of the processing taxes who could prove that they had not passed the tax on either to producers or to consumers could bring a suit to recover the sums paid. This provision showed foresight as in January 1936, the Supreme Court did declare the AAA unconstitutional.

The producers who were hit hardest by the depression were the farmers and one of the objectives of the New Deal was to ease, their burden by raising the price of agricultural products, not merely absolutely, but even relatively to other products. In this respect, the policy of the Administration achieved considerable success though it was undoubtedly helped by a succession of short harvests and in particular by the unprecedented drought of 1934. Assuming the 1909-14 relationship to be a reasonable one, it can be said that the great discrepancy, that existed in 1932 between the price level of farm products and that of goods bought by farmers, has been largely corrected.

As the Agricultural Adjustment Act was declared as unconstitutional by the Supreme Court, the Government made an amendment to the Soil Conservation Act of 1935 empowering the Secretary of Agriculture to offer bounties to farmers out of general taxation for 'conservation of the soil'. The amendment refers to the 're-establishment of the ratio' and not to the price parity; this ratio is the one between the purchasing power of the net income per person on farms and that of the income per person not on farms.

## THE WAR PERIOD AND THE POST-WAR DEVELOPMENTS

The rapid rise in demand created by increased industrial activity and the institution of lease-lend in 1941 created a boom in United States agriculture. The high prices stimulated agricultural production and led to a greater demand for fertilisers and farm equipment. As about five million people left farms for industry and the Armed Forces, the farm labour force declined. Those who remained on the farm, however, more than made up for the loss of labour by working longer hours and making increased use of labour-saving devices. Between 1919 and 1949, farm output increased by 65% of which 32% took place between 1939 and 1949. The development of new crop varieties and the control of insect pests and diseases has substantially helped yield per acre and output per man. There has been a progressive betterment of the average dietary pattern. The number of farmers is almost six millions while the area of crop land is 360 million acres. Co-operative Marketing plays an important part in the disposal of the farm product. Half of the farmers belong to co-operatives. Government agencies also make efforts to improve the marketing techniques. Under the provisions of the Research and Marketing Act large sums are spent by the Department of Agriculture on research work in connection with marketing and distribution. The handling of agricultural products is being increasingly mechanised. The canning and frozen food industries have made great strides during recent years. Under the provisions of the Federal Food, Drug and Cosmetic Act of 1938, the Food and Drug Administration maintains a very close watch upon the manufacture and distribution of all foods entering inter-state commerce and ensures that they are sanitary, free from adulteration and are properly packed and labelled.

The exports of agricultural products had been declining since the middle twenties and though they recorded a brief recovery in the thirties, they slumped in 1940 to the lowest point since 1870. Their value dropped from four thousand million dollars in 1919 to a mere six hundred million dollars in 1939; in 1949, it was over three and a half thousand million dollars. With the introduction of the lend-lease, there was a spectacular rise but still they fell short of the 1918-19 peak by about fourteen per cent. During the period of the second World War, the Administration took steps to restrict domestic demand and to set aside goods for overseas requirements. The end of the lend-lease brought about a setback but it proved to be a temporary one and was more than cancelled out by the expenditure of foreign loans and subsequently of the Economic Co-operation Act dollars. Thus, we find that during recent years, the scale of agricultural exports has been determined by the measures for foreign economic assistance. The Marshall Aid granted under the Economic Co-operation Act is the outstanding example of this type. During the fiscal year ended 30th June 1950, the second year of the European Recovery Programme, about 64% of the agricultural exports were financed under the E.C.A. or army relief for occupied areas. During the thirties, one-third of the agricultural exports were directed to the United Kingdom, one-third to other European countries and one-third to the rest of the world. By 1949 the U.K. share had dropped down to 9.5%. Under lend-lease, the European Recovery Programme and the United Nations Relief and Rehabilitation Administration, other countries particularly in Europe received the major share; at the peak of lend-lease, for example, eighty per cent of the total went to Europe. The traditional pattern in the U.S.A. has been for the grains, cotton and tobacco to account for about two-thirds of the total; in 1914 and 1949, for example, this group accounted for 70% and 72% respectively of all exports.

Taking 1910-14 as the base, the indices of prices received by farmers for all farm products were 107 and 286 for 1935-39 and December 1950 respectively. The corresponding indices of prices paid by farmers for all commodities, interest and taxes were 127 and 261 respectively. Thus, while the index for prices received by the farmers rose by more than two and a half times during this period, the index of prices paid by the farmers was just doubled. This indicates an improvement in the level of farm incomes. Since the twenties, the relatively low level of farm incomes had been a major economic problem, especially as thirty per cent of the total population derives its income either directly or indirectly from farms. In order to encourage agricultural production during the war, the Secretary of Agriculture was empowered by legislation to provide price supports of at least 90% of parity not merely for the six basic commodities but for many other agricultural commodities as well. "Parity" is the ideal ratio between farm prices and farmer's expenses based on the golden age of farm prosperity, the period from 1909 to 1914. In order to insure the farmers against a sudden fall in prices after the war, the legislation was extended over further two years and ceased to be made applicable at the end of 1948. In that year, the Hope-Aiken Act was passed; the Act permitted continuation of war-time methods of price support for a further year and provided for subsequent years a sliding scale of support prices ranging from 60% to 90% of parity for the basic crops but with no specified minimum for other commodities. The Act was, however, superseded by the Anderson Act of 1949 which took over its main provision, continued the 90% support level for basic crops during 1950 and set a minimum of 90% for 1951 and 75% for subsequent years. For most other crops, the minimum support level was fixed at 75%; the Secretary of Agriculture was, however, authorised to fix lower levels under certain conditions. The Brannan Plan was made applicable before the outbreak of the Korean war. Under this plan, the ten commodities which are most important in farm income would receive mandatory support. Suport for the other commodities would depend upon the availability of funds and the judgment of the Secretary of Agriculture. The ten important commodities were subdivided into storable and non-storable groups. In the storable group came wheat, corn, cotton and tobacco, which are to receive support from the Administration in maintaining the parity. The important commodities among the non-storable group would be sold in the market for what they would fetch; cash payments would, however, be paid to the farmers on the basis of the difference between the average market price and the support price for the different commodities. The Plan thus put a premium on efficiency of farmers and quality of their products. As the Korean war brought farm surpluses to an end and raised farm prices to record levels, the problem of maintaining the parity lost its former significance.

We may conclude by referring to certain major long-term problems of the United States agriculture. The tropical intensity of the rainfall, the hot summers and the difficulty of maintaining humus in the soil under monocultural conditions, make soil erosion a serious menace. The wind also causes erosion of the soil; during the drought years of the early thirties, the damage wrought by wind was a conspicuous one. Water erosion on dry as well as irrigated areas is also widespread and takes a heavy annual toll of top soil and soil fertility. Certain agricultural practices like the crop rotation can reduce the incidence of these factors. Cultivation on the contour instead of on the slope and the building of terraces across the slope also help to prevent water erosion. It is necessary to impress on every farmer the urgency of planning the cropping of his farm with a view to prevent erosion of the soil. Such a long-term policy may, however, clash with the farmers' short-term aim of earning higher income. The Federal Soil Conservation Service and the Extension Service of the states have organised soil conservation districts covering over three-quarters of the farmland; complete conservation programme has, however, been put into operation in only one-tenth of the total area. The adequate supply of water is a comparatively new but nevertheless a long-term problem in the country. By far the greatest use of water is for irrigation; increasing population and greater industrialisation are also making heavy demands on water supply. Another long-term problem is that of raising the low standard of living of farmers in the Cotton Belt in the southern states and the Appalachian region. Greater industrialisation, diversification of farming resulting in a reduced dependence on cotton and an increase in the size of the small farming units are the remedies suggested. The poverty of the farmers and the consequent shortage of capital have proved a great handicap. The region is, however, ideally suited for the production of meat and butter fat. Grazing facilities are available throughout the year in this area; the mild humid climate of the area is particularly favourable for this purpose. Investment of an adequate amount of capital, adoption of new methods of pasture and livestock management and provision of facilities for refrigeration would bring nearer the solution of the difficulties facing this region.

# INDIA

## THE SITUATION ON THE EVE OF THE FIRST FIVE YEAR PLAN

India is predominantly an agricultural country; the largest proportion of its natural resources consist of land and by far the larger proportion of its inhabitants are engaged in the exploitation of land. Of the total cropped area of 317 million acres for 1950-51, 78 per cent was devoted to food crops and 17 per cent to commercial crops. During the last four decades, the gross cropped area has increased as a result of double cropping but little new area has come under cultivation. A major state effort at reclamation seems to be necessary for this purpose. The production of foodgrains has not kept pace with the increase in population during this period. The separation of Burma in 1937 reduced internal supplies by about 1.3 million tons and the Partition in 1947 reduced them further by .77 million tons; since 1948, we have been importing large quantities of foodgrains. To maintain consumption at the level of 1950, that is, 13.71 ounces per adult per day, the additional quantity of foodgrains needed in 1956 will be 6.7 million tons. To raise consumption to 14 ozs. laid down by the Nutrition Advisory Committee for a balanced diet, the additional quantity will have to be 7.8 million tons.

Ours has been a relatively stagnant agricultural economy of small holders; the evils of usury and indebtedness have been rampant in the rural areas. The passing of the first Co-operative Societies Act in 1904 meant an effort at building up by mutual association the people's own credit institutions. Since then the co-operative societies have come to occupy a more positive role. With 1,81,000 societies, a membership of 13.7 millions and a working capital of Rs. 276 crores for 1950-51, the co-operative movement constitutes an important economic and social force in the country.

The growth of population and the repeated subdivision of land has led to a system of distribution in land in which large estates are an exception, the vast majority of holdings being relatively small in size. The percentage of area covered by holdings of the size of less than ten acres exceeds fifty in most of the States. Legislation for the abolition of Zamindari and for the protection of tenants has reduced the degree of disparity which existed in the distribution of land. The general picture is one of numerous small holdings, a large proportion of them being uneconomic, a small number of middle peasants and a sprinkling of substantial owners. In a scheme of distribution or resettlement, the first claim will be that of tenants already working on lands which may be taken over from the larger owners; the landless workers would not benefit much from such a re-distribution. In this context, the contribution of the Bhoodan movement initiated by Acharya Vinoba Bhave has special significance; it gives to the landless worker an opportunity not otherwise easily available to him. According to the Census of 1951, out of a total rural population of 295 millions, 249 millions are engaged in agriculture. Of the latter, 18 per cent were returned as cultivating labourers and their dependants. Cultivating labourers were broadly defined as employees of cultivators. The agricultural workers may be broadly classified into two groups, namely, 'casual' workers and 'attached' workers. The latter are those who had continuous employment for one month or more at a time. In India, the casual worker is by far the larger group. Agricultural labour populations are naturally concentrated most in those areas where population presses heavily on the land and the development in sectors of the economy other than the agricultural, has been far from satisfactory. Under the Minimum Wages Act, the State Governments are required to fix by the end of this year, minimum rates of wages for agricultural labour. The decline of rural industry has aggravated the gravity of the problem as several artisans have been compelled to become part-time labourers. The excessive sub-division and fragmentation of holdings have driven many a peasant farmer to seek casual labour. The presence of a large number of agricultural workers who lack sustained employment is a source of serious weakness and even of instability in our agrarian system.

The inadequacy of finance and the absence of credit facilities at reasonable rates are the other handicaps which the farmer has to face. He is thus unable to go in for improved seeds and manures or to introduce better methods or techniques. For want of capital, works of minor irrigation like wells owned by the cultivators either get into disuse or are not fully utilised. The loans needed by the farmers may be classified into three groups; short-term, medium-term and long-term. Short-term loans are needed for purchasing seeds, manures or for meeting labour charges and other minor current needs. They may be repaid after harvest and their period may be a year or so. The medium-term loans are needed for purchase of bullocks, improved implements and other expenditure of a similar type; they may be repaid in instalments spread over three to five years. The long-term loans are utilised for payment of old debts, purchase of heavier equipment, increasing the size of the holding and making permanent improvements on land. Their period may range from ten to twenty years and in certain cases it may be even longer. The moneylenders and the landlords have been the principal sources of rural credit. The recent debt relief legislation, the system of licensing moneylenders and the restrictions on the use and transfer of land as security have, to a certain extent, improved the position of the farmers in debt and curbed the evil of exploitation by the moneylender. The lending activities of the landlords and larger cultivators have also been discouraged by the abolition of all privileged tenures and the reforms in zamindari and ryotwari areas. On the other hand, the amount of taqavi loans sanctioned by the State rose from a mere one crore in 1938-39 to Rs. 15 crores in 1949-50. The corresponding figures for the loans advanced by agricultural credit societies were Rs. 7 crores and 28 crores respectively. Nearly two-thirds of the total loans were granted in the two States of Bombay and Madras, while one-fifth of the total was utilised by the societies in U.P., Madhya Pradesh and the Punjab. The credit movement in other States has yet to be developed. In 1949-50, the Land Mortgage Banks numbering 283 advanced a sum of Rs. one crore by way of long-term loans extending up to twenty years. A major part of these loans as well was taken up by Bombay and Madras. Though ultimately the co-operatives will have to build up their own finances, in the initial stages, they need considerable financial assistance from outside agencies. The Reserve Bank provides short-term accommodation to the State Co-operative Banks for seasonal agricultural operations and marketing of crops at 1½ per cent, a rate much below the Bank Rate. The Reserve Bank has liberalised the procedure for grant of advances to the Apex Co-operative Banks; these advances amounted to Rs. 12.5 crores in 1951-52. The Reserve Bank also takes an active interest in reorganising the co-operative movement in all states. The absence of adequate trained staff is a serious limiting factor in the growth of the co-operative movement. The Reserve Bank has offered help in this field as well by organising a special course of training for higher and intermediate personnel.

Agricultural marketing in India presents certain problems arising on account of the inadequate finances at the disposal of the farmer. The farmer cannot afford to wait long after the harvest and the markets witness conditions of glut, resulting in a sharp decline in prices. The village money-lender advances loans to farmers, sometimes on the understanding or an obligation, to sell the produce to or through him; the advantage of his position as a creditor enables him to exploit the situation. Farmers are, therefore, advised to sell in regulated markets where unauthorised deductions are prohibited and the charges of brokers are regulated. Co-operative marketing would also be of great help to the farmer.

The progress of marketing societies in India has been so far a slow one; opposition from trading interests has often been experienced. Further, the co-operatives should not act merely as commission agents for sale; ownership and management of the processing facilities are essential for protecting the interests of the producers. The absence of satisfactory warehousing facilities in the country is a great handicap. The warehouse receipts can serve as collateral for the promissory notes of the co-operative and scheduled banks which can borrow from the Reserve Bank on this basis. Establishment of a large number of licensed warehouses would go a long way in solving this problem. Methods of grading should be widely adopted to enable the farmer to claim a price commensurate with the quality and to provide a basis for the issue of negotiable receipts by warehouses. The Agricultural Produce (Grading and Marketing) Act of 1937 has encouraged scientific grading; the use of Ag-mark labels under certain conditions is permitted by the Act. To remove the bewildering variety of weights and measures and to introduce an uniform system instead, the Standard Weights Act was passed in 1939.

Several problems of agricultural development can be solved by the successful application of scientific knowledge to the everyday operations of the ordinary cultivator. In India nearly four-fifths of the cultivated area is dependent on rainfall. The vagaries of the monsoon are well known; the rainfall is seldom adequate and timely throughout the country. Failure of crops in one region or the other almost every year is a common feature of Indian agriculture. To secure the maximum output from the land, therefore, it is essential to provide through irrigation an additional source of water supply to cultivated land. The area under major irrigation works is 20.6 million acres while that under minor irrigation works was 26.4 million acres; the total of the two forms roughly sixteen per cent of the total area sown in a year. Most of the canals are owned by Government but most of the wells and tanks are in private hands. During the last three decades, the area under private irrigation has remained more or less unchanged. Increased state assistance in this respect is thus indicated. Increased production of crops can be secured also by the use of improved seed, manures and fertilisers. During and since the second World War, the use of power-driven machinery by cultivators has become more common than before. The increased financial assistance made available during the Grow More Food Campaign accelerated this process. The number of tractors imported thus rose from 3,318 in 1949-50 to 7,400 in 1951-52. One must, however, remember that, for a variety of reasons, Indian agriculture will have to rely on animal power for a long time to come. The small size of holdings, the absence of avenues of employment other than agriculture and the shortage of fuel oils are some of the important factors militating against the use of tractors in the country. To prevent damage to crops by insects and pests, scientific methods of control have to be adopted.

To enable the cultivators to practise scientific agriculture, spread of agricultural education and training is necessary. The extension staff appointed by the Government has so far relied on propaganda rather than on actual demonstration of the scientific methods to the cultivator. In the institutions imparting agricultural education, insufficient stress has been laid on practical work. Prior to 1930, agricultural research was conducted at the Indian Agricultural Research Institute at Pusa and in the research institutes attached to the Departments of Agriculture in various States. The Royal Commission on Agriculture in its report observed that there was lack of co-operation between the Institute at Pusa and the Provincial Governments and that similas conditions prevailed even among the agricultural department of the various provinces. In 1930, the Indian (then called as Imperial) Council of Agricultural Research was, therefore, constituted to promote, guide and co-ordinate research in the country. The I.C.A.R. shared a portion of the cost of certain schemes undertaken by the different States and had a certain measure of control over them. But the cost of many other schemes was borne entirely by the States and naturally, the I.C.A.R. had no control over such schemes. The Commodity Committees established in various States between 1921 and 1949 fell in the latter category. On these Committees were represented all the interests concerned with the particular commodity, *e.g.*, growers, traders, processors and others. The object of forming such Committees was to promote research in that particular commodity. The work done by such Committees for cotton, jute, tobacco, sugarcane and oilseeds has been a commendable one. Such a crop-wise compartmentalisation, however, means exclusive attention to problems of one crop in disregard to those of other crops and was, therefore, discouraged by the Royal Commission on Agriculture. Moreover, experience has shown that the formation of such Committees gets confined to commercial crops and does not extend itself to important foodcrops like wheat, rice, pulses and millets. Besides the Commodity Committees, agricultural research is also conducted at the Central Research Institutes in the country. Notable examples of such institutes are the I.A.R.I. at Delhi, the Potato Research Institute at Patna and the Rice Research Institute at Cuttack. Valuable suggestions to improve the work of the I.C.A.R. were made by Sir John Russell in 1937 and by Dr. Stewart in 1946.

According to the 1951 livestock census, there are 150 million cattle and 43 million buffaloes in the country. The annual contribution of the livestock to the gross national income has been estimated to be about Rs. 1,000 crores, excluding the value of the animal power for draft purposes. It is estimated that the cattle population of the country has been more or less stationary during the last three decades. On the existing fodder and feed resources, only two-thirds of the cattle can be maintained in a fair condition. The Cattle Utilisation Committee has estimated that about 10 per cent of the cattle population are unserviceable or unproductive. There is a deficiency of good milch cows and working bullocks; on the other hand, there is a surplus of useless or inefficient animals pressing upon the scanty fodder and feed resources and aggravating the problem of deficit in this respect. Work on cattle improvement has been done by the Government, by cattle breeders and by charitable agencies; in view of the requirements of the country, however, their work is far from being an adequate one. The annual average yield of milk per cow is just 413 lbs; about the lowest of any country in the world; the corresponding figure for a buffalo is 1,100 lbs. In 1951, the average per capita consumption of milk and milk products was 5.5 ounces.

Soil erosion is one of the most serious problems facing Indian agriculture. Sheet erosion which consists in the washing away of the fertile top-layers of the soil is the most common form of erosion. It occurs even on moderately sloping lands and causes enormous losses to agriculture every year by reducing the productive capacity of land. Erosion as a result of wind actions is common in the dry western regions of the country. The destruction of forests has been the main cause of erosion in the country. Vegetation protects the soil from being washed or blown away and preserves the physical and hydrographic balance of nature. In the forests of Assam, Bihar, Orissa and Madhya Pradesh, shifting cultivation practised by the tribal people has led to the destruction of forests. Unregulated grazing and overgrazing are common in most of the parts of the country and leads to soil erosion. Clearance of forests for expansion of cultivation to relieve the pressure of population on land, intensive felling to obtain supplies of fuel and timber and failure to practise measures like proper crop rotation and ploughing along the contours on sloping lands are the other contributory factors.

Fisheries contribute annually ten crores of rupees to the national income. Fish is a valuable protective food, rich in proteins, vitamins and mineral salts. The production of fish is estimated to be about a million tons; seventy per cent of the production is sea and estuaries fish while the remaining is fresh water fish. Madras, Travancore and Cochin and West Bengal account for a major part of the production. The availability of fish per capita is 3.4 lbs. per annum; it is 90 lbs. for Japan. Even allowing for the population not consuming fish, the per capita figure works out to be as low as 4.94 lbs. Only a fraction of the culturable waters has been so far explored. The main handicaps have been the non-availability of adequate harbour and landing facilities and the difficulty for the small country craft to operate beyond a few miles from the shores. The fishery trade is beset with middlemen on whom the fishermen are required to rely almost completely for their equipment. The middlemen exploit the situation; a determined effort to organise fishermen's co-operatives is thus necessary. In Bombay, Madras and Orissa, the co-operatives have done a good amount of pioneering work in this field. The problem of marketing is also beset with several difficulties. Though most of the fresh water fish is marketed and consumed as fresh fish, only one-fifth of the sea fish catch is consumed as fresh fish, the remaining being preserved as sun-dried fish, salted fish or converted into fish meal and manure. If sea fish is marketed as fresh fish, the fishermen will get a better price for it; moreover, it will meet the large unsatisfied demand for fresh fish. The inadequate provision of cold storage and transport facilities and the short supplies of ice present enormous difficulties. In the marketing of fish, it is also noticed that a considerable amount of wastage occurs and that the handling is unhygienic. Regulation of markets and the elimination of middlemen by co-operative marketing are necessary to improve conditions of marketing.

The rise of large-scale industry has led to a steady reduction in the demand for the products of artisans in the villages and a deterioration in conditions of village industries and handicrafts. In India, certain institutions have a long record of valuable work and considerable experience in the field of village industries, prominent among them being the All-India Village Industries Association, the All-India Spinners Association and the Khadi Pratisthan, Sodepur. The development of village industries and handicrafts would provide channels for employments not only for artisans but also for farmers and landless labourers. The importance of their role in village development cannot, therefore, be overemphasised. Active state assistance is, however, needed in the early stages of their development. Village industries cater in the main, to local market, adopt simple techniques and deal with local raw materials. In the past, individuals used to work as distinct units in a loose organisation; in the modern context, however, efforts will have to be made to make the village industries work in compact units. To improve the quality of the product, research in village industries and handicrafts will have to be carried out and systematic training imparted to village artisans. Industrial co-operatives aided by the State can solve the problem of providing adequate finance to the artisans.

## THE FIRST FIVE YEAR PLAN

### THE OUTLAY

The Plan involves an outlay on development by public authorities of Rs. 2,069 crores over the period 1951-56. Agricultural development receives the highest precedence; this necessitates an extensive programme of irrigation covering minor as well as major projects. Of the total outlay, Rs. 361 crores or 17.5% are allotted to agriculture and community development while irrigation secures Rs. 168 crores or 8.1% Production and extensive distribution of electrical energy is essential for the growth of small-scale enterprises as well as for rural development and industrial expansion. Generation of electric power thus receives a high priority; it is in most cases linked with the major irrigation projects. For multi-purpose irrigation and power projects, a provision of Rs. 266 crores or 12.9% is made while for power projects it is Rs. 127 crores or 6.1%. The high priority given to agriculture, irrigation and power projects has naturally limited the investment in the public sector for industries. Industrial expansion will have, therefore, to rest largely on private initiative and resources. To appreciate the priority given to agriculture, the Plan should be viewed as a preparation for planning. As the Planning Commission points out, "it is necessary first of all to strengthen the economy at the base" and in our country, the base is agriculture.

## THE TARGETS

The targets of additional production envisaged in the Plan are as follows :

| | Quantity (*in millions*) | Percentage increase. |
|---|---|---|
| Food Grains | 7.6 (tons) | 14 |
| Cotton | 1.26 (bales) | 42 |
| Jute | 2.09 (bales) | 63 |
| Sugarcane | 0.7 (tons) | 12 |
| Oilseeds | 0.4 (tons) | 8 |

Major and minor irrigation works are expected to make the largest contribution to the increase, aided by improved seeds and more manure. Reclaimed land is expected to add 1.5 million tons of foodgrains. Additional 8.5 million acres of land will be brought under major irrigation during the period of the plan, the corresponding figure for minor irrigation being 11.2 million acres. The increase in population during the five years will itself require an additional two million tons of food to maintain consumption at the same level. Since 1948, the country has been importing nearly three million tons of foodgrains on an average per year and if the level of the annual imports be regarded as indicating the size of the deficit, the proposed increase in production of foodgrains should suffice to maintain consumption at a slightly higher level. The needs of the textile industry are also expected to be fulfilled by the increase in production of cotton and jute.

The community development projects are conceived primarily as a programme of intensive development of selected areas. They would also contribute to raising the level of agricultural production. The initial programme provides for 55 projects located in selected areas in the different states. A provision of Rs. 90 crores has been made for the purpose. The rural development has never been thought of so far as something embracing all aspects of rural life and work. Under the scheme of community development, this aspect is sought to be remedied. The scheme will cover agriculture and related matters, communications, education, health, supplementary employment, housing, training and social welfare and is unique in its integrated and supra-departmental approach to the problem of rural development. Above all, the scheme lays very great emphasis on the initiative and enthusiasm of the people themselves.

The target for electrical energy in 1955-56 is 3.5 million Kws (installed capacity) as against the 2.3 million K.W. in 1950-51. Electricity will be useful for rural electrification as well as for agricultural operations like pumping and processing of agricultural produce. It will also be a boon to the cottage and small-scale industries in the villages.

The proposed increases in production will raise the national income by eleven per cent. It should be noted, in this connection, that the benefits of the investment outlays undertaken during the period of the Plan will not, in all cases, be necessarily and fully realised during the period of the Plan itself. A considerable part of the benefit of the additional irrigation and power facilities, for example, will materialise only in the succeeding quinquennium, though the greater part of the investment necessary for the purpose will have taken place in the period of the present Plan. The Plan involves doubling the development expenditure of public authorities from Rs. 232 crores in 1950-51 to nearly Rs. 500 crores by 1955-56. The Plan aims at stepping up the rate of investment and creating more employment for those engaged in construction activity; it also aims at, in a later stage, building up capital at key points to enable a growing number of persons to be absorbed into the productive system. As far as agriculture is concerned, the benefits of irrigation, major as well as minor, will accrue to about nineteen million acres of cultivable land during the period of the Plan. The provision of perennial irrigation facilities in certain regions will help to reduce seasonal unemployment. Even in those regions where the irrigation facilities are seasonal in character, the rise in productivity will lead to a rise in incomes. The rise in the effective demand in the rural sector, so brought about, will mean an impetus to development industries and services as well. In an underdeveloped economy, the problem of increasing income and scope for employment is in the ultimate analysis, related to the problem of capital accumulation. The Plan aims at raising domestic investible surpluses from the estimated level of Rs. 450 crores in 1950-51 to about Rs. 675 crores by 1955-56. This involves a curb on consumption and implies the need for controls during the period of the Plan.

The Planning Commission makes a special reference to the willing and constructive participation of the people which alone can ensure the success of the Plan. A reorientation of the machinery of administration is also necessary. Under a democratic set-up, the village panchayats and the multi-purpose co-operatives are the most appropriate agencies to assume responsibilities to achieve the end in view. The Commission regards it as reasonable that the co-operative should be ungrudgingly helped by the State in their formative years; this will enable them to utilise the opportunities offered to them and to consolidate their strength.

## LAND REFORMS

The Commission takes the abolition of zamindari tenure for granted. It lays down two broad principles in respect of land managed directly by substantial owners and in case where there are no tenants in occupation. Firstly, there should be an absolute limit to the amount of land which any individual may hold. Secondly, the cultivation and management of land held by an individual owner should conform to standards of efficiency to be determined by law. The Commission, however, points out that the number of substantial owners and the area of land under their personal management are not likely to be large, especially after an allowance is made for the abolition of zamindari and the land already with tenants. The problem of land held by substantial owners falls into two distinct parts, *viz.*, land now under the cultivation of tenants and land under the direct management of owners cultivated by tenants-at-will. The Commission suggests that the acreage in excess of the limit on resumption for personal cultivation, should be purchased by the tenants in due course; to facilitate such a purchase the price of land should be fixed as a multiple of its rental value and the tenants should be allowed to make the payments in instalments spread over a period. The tenants should also be given security of tenure for this purpose. The Commission also makes certain suggestions in respect of small and middle owners and their tenants. Owners of land not exceeding a family holding are classed as small owners while those holding land in excess of one family holding but less than the limit for resumption for personal cultivation, are classed as middle owners. The small and the middle owners are to be encouraged to organise their activities on co-operative lines. If such an owner fails to resume land for personal cultivation during a prescribed period, the tenant would get the right to buy land. The co-operative farming societies to be voluntarily formed by the small and the middle farmers should conform to certain rules and conditions. The area under a co-operative farming society should not be less than a prescribed minimum. Preference should be given to the co-operative farming society in the matter of supplies, finance, technical assistance and marketing. It is hoped that such a widespread extension of co-operation will be a major determining factor in achieving the rapid reorganisation of our village economy. The

Commission conceives of the scope of rural organisation in terms even wider than this when it refers to the form of the co-operative village management. It is suggested that if the majority of owners and occupancy tenants agree, legislation may be framed which will enable the village community to manage the entire area of a village as if it were a single farm. The conception of the co-operative village management covers even the activities relating to the creation of non-agricultural employment and the provision of social services.

The working of the Grow More Food campaign has confirmed the view that all aspects of rural life are inter-related and that no lasting results can be achieved if individual aspects of it are dealt with in isolation. The Grow More Food Enquiry Committee, therefore, recommended the establishment of a national extension organisation or service. Such an organisation has as its object the carrying out of intensive rural work reacting on every farmer and affecting rural life as a whole. The Plan provides that the Central Government should assist State Governments in establishing extension organisation so as to bring their entire area under the scheme within a period of about ten years. During the period of the present Plan, about 1,20,000 villages covering nearly one-fourth of the rural population, have to be brought under the national extension service.

## AGRICULTURAL FINANCE

The Commission observes that agricultural production suffers considerably for lack of adequate finance and emphasises the need for building up institutional credit agencies. It recommends the administration of State assistance as far as possible through co-operative agencies; for, they are better able to mobilise local savings and utilise the assistance provided by the Government. The available credit agencies touch only a fringe of the problem of agricultural finance and the co-operative movement cannot raise adequate funds to meet the growing demand for agricultural credit. The situation is further complicated by the fact that the problem of rural finance is essentially the problem of making credit available to cultivators engaged in marginal and sub-marginal farming. In the conventional sense, therefore, the vast majority of the farmers are not credit-worthy. It is essential that the co-operative credit structure has to be strengthened at various levels in each State. The Co-operative Planning Committee of 1946 recommended that 50 per cent of the villages and 30 per cent of the rural population should be brought under the ambit of primary societies within ten years. The programme for the national extension service under the present Plan contemplates organisation of multi-purpose societies covering one-fourth of the rural population. The Commission is of the opinion that in this field a slower rate of progress would be preferable to hasty expansion. The Commission has recommended that the Reserve Bank should continue to provide funds to the apex co-operative banks for short-term finance which in turn are to make it available to the district banks. In case, the apex banks find it difficult to secure adequate capital, the State Governments should subscribe a part of their capital, be represented on their boards of management and as a temporary expedient, may even guarantee repayment of the loan advanced to the apex bank. The Plan further provides that the Reserve Bank should make available Rs. 5 crores for medium-term finance. As regards the long-term needs, the Commission relies on the finance to be provided by the land mortgage banks. In 1949-50, the State taqavi loans amounted to Rs. 15 crores while the advances by agricultural credit societies amounted to Rs. 28.25 crores and those by the land mortgage banks amounted to a crore. In 1951-52, the Reserve Bank advanced Rs. 12.5 crores to apex co-operative banks. As a result of the Grow More Food campaign, the State has assumed increased responsibility for development finance. A major part of the loans advanced by agricultural credit societies as well as the land mortgage banks was taken up by Madras and Bombay States where the co-operative movement has progressed fairly well. The successful management of the co-operatives depends on trained personnel. The Commission stresses the need to start three more regional colleges for this purpose and provides rupees ten lakhs to subsidise the expenditure involved. We have referred above to the reliance of the Commission on land mortgage banks for purposes of long-term finance. These banks raise long-term funds by shares, debentures and fixed deposits. It should, however, be noted that such banks have made progress only in a few states, *e.g.*, Madras, Bombay, Mysore and Madhya Pradesh. The inability of the borrower to offer land as a security and the lack of trained personnel have retarded their progress. The Commission has, therefore, made recommendations which will, in effect, remove both these handicaps. In the past, the major part of the advances made by the land mortgage banks were for repayment of old debts. The Commission desires a change in this policy and suggests that the land-mortgage banks should henceforward give preference to applicants who want to increase their resources for increased production. The land mortgage banks including even the well-established among them have often experienced difficulty in raising finance by debentures. To supplement the long-term resources of the co-operative movement, therefore, the Commission has made a provision of Rs. 5 crores to be spread over the last three years of the Plan and the target for long-term finance, Government and co-operative combined, has been fixed as Rs. 5 crores per annum at the end of the present Plan. To supplement the medium-term finance provided by the Reserve Bank, the Commission has provided Rs. 5 crores to be spread over the last three years of the Plan. In the actual disbursement of these ten crores—five crores each for medium-term and long-term finance—preference is to be given to areas not served at present by the co-operative credit system. The target for medium-term finance—Government and co-operative combined—at the end of the Plan is placed at Rs. 25 crores per annum. The

Commission estimates the need for total institutional rural credit at Rs. 100 crores per year by the fourth year of the Plan. Shri V. P. Varde, an eminent co-operator, suggests the formation of a National Agricultural Credit and Development Corporation. This would bring about co-ordination of the short-term, medium-term and long-term credit agencies. In the words of the Planning Commission, this would bring about the "integration of the financial agencies" which "would have to extend to all organisations, co-operative, commercial and others which act as repositories and suppliers of credit." He points out that the Reserve Bank which is the repository of the banking system in the country and is charged with the functions of regulating currency and maintaining financial stability, has obvious limitations on its own financial commitments in providing finance to agriculture which is the largest industry of the country, and therefore, makes a plea for the formation of such an autonomous body.

## AGRICULTURAL MARKETING

The Planning Commission suggests that co-operative marketing should be linked with production, finance and co-operative ownership of processing industries. State Governments are to take active steps to organise and equip the co-operatives. A standing committee of experts on processing and marketing at the centre would assist the State Governments and the co-operatives in drawing up detailed schemes. Co-operatives are to be given adequate representation on the managing committees of regulated markets. Wool, bristles, lac, sheep and goat-skins, cashew-nuts, vegetable oil-seeds, oils and hopak are to be brought under compulsory grading in successive stages under a scheme costing about Rs. 86 lakhs. The importance of these commodities in our export trade can be realised when we note that their export value during the three years immediately after partition was of the order of Rs. 110 crores; as a result of the scheme under the Plan, the export value of these commodities is estimated to increase by about ten per cent. The Commission lays emphasis on the enforcement of the Standard Weights Act in each State.

## IMPROVED SEED, MANURES AND FERTILISERS

The Commission regards it desirable that the multiplication and distribution of pure seed should be decentralised so that nucleus seed can be made to reach every single village or a group of villages and recommends the location of a seed farm in each block of a Community Project. It also recommends the appointment of a standing committee of Plant Breeders and Extension Workers by the Indian Council of Agricultural Research. The Committee is to review every year the technical and administrative aspects of the multiplication and spread of improved varieties of seed and make its own recommendations to improve the situation. The Commission also recommends the appointment of a Committee of the ICAR to estimate the country's manurial and fertiliser requirements, and to report on the development of the utilization of manures, human and cattle wastes, green manures and fuel gas.

## AGRICULTURAL IMPLEMENTS AND MACHINERY

The Commission recommends the setting up by the ICAR of Regional Committees consisting of technical experts, enlightened farmers, representatives of the State Governments, manufacturers and dealers. These Committees are to guide research, approve schemes drawn by the States and review their progress. Efforts should be made in the States to popularise improved implements. During 1951-52, tractors worth Rs. 6 crores were imported into the country; imports of a similar value per year for the later years of the Plan are anticipated. While the advantages of using tractors for reclamation of lands or for drainage and soil conservation operations are obvious, caution has to be exercised in their use on a large scale, lest it creates conditions of unemployment.

## AGRICULTURAL EDUCATION AND RESEARCH

The Commission lays emphasis on the practical aspect of education. The trainee must be moulded physically and mentally into the practice of what is known as the 'dirty hands' method; this alone will enable him to demonstrate it successfully in the field or practise it himself on his own farm. It is proposed to start ten more schools during the Plan period; the existing 38 schools are to be converted into the Manjri pattern of two-year schools in Bombay State. In these boarding schools, every item of work in the farm has to be done by the students. To meet the great demand for village level workers to man the Community Projects, special centres to impart training are to be organised through the help of the Ford Foundation. The college education suffers, in a greater measure than the school education from the complaint of inadequate emphasis on practical aspect. The Indian Council of Agricultural Education set up by the ICAR has, therefore, suggested that the course of studies in colleges should include intensive practical training under rural conditions for a period of two months in a year. Most of the graduates turned out by the colleges exceeding twenty in number, secure employment in the Agricultural Departments. To maintain the pace of agricultural development envisaged under the Plan, the need for research work cannot be overemphasised. The drawbacks inherent in the Commodity Committees are to be removed. The Standing Scientific Committees of the ICAR should examine the schemes of the Commodity Committees and should approve only of such schemes as would ensure an all-round agricultural development and a balanced growth of research in the various important crops grown in a particular region. The ICAR is to co-ordinate all agricultural research in the country; the research programme is to be drawn in consultation with the representatives of progressive cultivators, traders and processors in the particular region concerned.

## ANIMAL HUSBANDRY AND DAIRYING

The Plan proposes to establish 600 centres under the Key-village scheme, where breeding on controlled and scientific lines is to be undertaken; each centre will consist of three or more villages having about 500 cows. During the period of the Plan, 150 artificial insemination centres are proposed to be established. To segregate the useless cattle, the Plan provides for establishing 160 *Gosadans*. The *Gosadans* will be located in waste lands, forests and other out-of-the-way places where fodder supply is not being utilized. Each *Gosadan* will maintain about 2,000 cattle. Schemes are also laid down for rinderpest, poultry farming, sheep and wool and veterinary education and research. For livestock and animal husbandry, the Plan provides for an expenditure of Rs. 14 crores. It is estimated that there would be an increase of about 14 million tons in fodder supply on account of the proposed addition of 7.6 million tons of foodgrains under the Plan. These increased supplies of fodder along with the better breeding contemplated through the key village scheme would result in an improvement in milk yield in rural areas. For each urban area, a Milk Board is to be set up. The Board would be a statutory body consisting of representatives of producers, distributors, consumers, municipalities, health authorities and the State Government and would deal with all matters relating to quality, distribution and prices of milk and milk products. It would also be entrusted with the task of organising production in the suburban and urban areas through a co-operative. The different State Governments propose to undertake 27 schemes for dairying and milk supply costing about eight crores of rupees.

## SOIL CONSERVATION

The Commission recommends the constitution of a Central Land Utilisation and Soil Conservation Organisation at the centre and a Land Utilization and Soil Conservation Board in every State to implement policies and programmes proposed. The Commission rightly points out that a large part of the soil conservation work has to be done by the farmers themselves who have to understand the nature of the erosion problem and to improve the farming practices with a view to control erosion. The function of the Government is mainly one of convincing the farmers of the need for adopting improved practices and demonstrating the correct methods to be followd for this purpose. The States are to enact suitable legislation providing for powers to execute specified improvements on the farmer's fields and to allocate costs of these improvements between farmers and the State and for the constitution of co-operative associations of farmers for soil conservation work. Further, certain areas are to be declared as 'protection areas' in which restriction of usage practices, is necessary for the purpose of protecting much larger areas from erosion, silting and floods. An all-India survey of soils and land utilisation is to be instituted under the Plan. In the Community Projects areas, improvements in land-use and agricultural practices would form the major part of the work. The establishment of a Soil Conservation Branch at the Forest Research Institute, Dehra Dun, of the Desert Research Station at Jodhpur, and of six research and demonstration centres in different states is also proposed.

## FISHERIES

The production target to be reached at the end of the Plan is 1.5 million tons as against the figure of one million tons at the commencement of the Plan. Besides the finances provided under the Technical Co-operation Aid Programme, the Plan provides for a total expenditure of Rs. 4.6 crores for this purpose. In Madras, Bombay and Travancore-Cochin, the schemes under the Plan mainly relate to the development and expansion of marine fisheries; in the maritime state of West Bengal on the other hand, the schemes mainly relate to inland fisheries as there is a considerable scope for development in this field. In the case of inland fisheries, the survey and stocking of new culturable waters and the collection of fry receive top-priority while in the case of marine fisheries the aspects of mechanisation, co-operative marketing, harbour, cold storage and transport facilities loom large.

## IRRIGATION AND POWER

Soon after the end of the second World War, a number of projects some multi-purpose and others only for irrigation were sanctioned; up to 31st March 1951, a sum of Rs. 153 crores had already been spent on them and their completion would cost Rs. 765 crores. The main irrigation and power projects already under construction under the Plan are: Bhakra-Nangal, Damodar Valley, Hirakud Dam, Tungabhadra, Lower Bhavani, Mayurakshi, Lower Tapti Valley, Machkhund Hydro-electric and Sarda Power House Projects. Irrespective of the merits of the projects under construction, the Plan, therefore, gives the highest priority to these projects. So that the expenditure already incurred on them would be put to productive use; even in implementing these projects, however, the Planning Commission insists on giving preference to those projects which will provide additional food. An expenditure of Rs. 518 crores on the schemes already in progress is sanctioned for the five-year period of the Plan; of this, a sum of Rs. 266 crores is to be spent in the first two years of the Plan. The target under the present Plan is to add 8.5 million acres to land under irrigation and 1.1 million K.W. to power available. The completion and full development of the projects already under construction would ultimately add 16.9 million acres to land irrigated and 1.4 million K.W. to power available in 1951. As the completion of the projects already under construction would themselves consume the major portion of the development expenditure allotted for this purpose, the Commission could not include many new works of irrigation and power development in the Plan. As the projects likely to yield additional food at an early date are to be given preference over others, the multi-purpose projects have been so phased as to lead to an early completion of their irrigation aspects. The generation of power is to be taken up in stages as the demand rises. The annual expenditure on works already under construction would be high in the first three years of the Plan; in the last two years of the Plan, however, it would be comparatively low leading to the necessity of undertaking some new projects with a view to utilise to the full the technical and other resources already built up over a number of years. The undertaking of such new projects whose construction will continue under the second Five Year Plan, would also enable continuity of development to be achieved from the first to the second Five Year Plan. Five new projects have thus been included : Kosi (Stage I), Koyna (Stage I), Krishna, Chambal (Stage I) and Rihand; their total cost is estimated to exceed Rs. 200 crores of which during the present Plan, Rs. 40 crores are to be spent. In addition to the major irrigation works referred to above, the Plan provides Rs. 47 crores for the minor irrigation works and gives a supplementary grant of Rs. 30 crores to what are called as the minor and medium irrigation works. The former works would add 8.2 million acres and the latter 3 million acres to land under irrigation in 1951. The two combined are expected to add 2.4 million tons to annual food production by the end of the Plan. The major portion of the expenditure on these works would be in the form of subsidies and loans to individuals and societies undertaking such schemes. These schemes are of particular significance as they involve a small outlay, provide a large amount of dispersed employment, and can be executed in a comparatively short period.

Of the total increase in generating capacity of 1.1 million

K. W. during the period of the Plan, one-third would be contributed by the three multi-purpose projects, *viz.*, Bhakra-Nangal, Damodar Valley and Hirakud Dam. On full developments of these projects, their ultimate capacity would be about one million K. W. In view of the urgency of the food problem, the irrigation aspect of the multi-purpose projects is to receive preference. As production of power much in advance of the demand implies locking up of capital and lower returns on the projects, it is proposed to take up the development of power in stages according to the rise in demand. The development of electricity in India has been in the past mainly urban; hardly ten per cent of the population enjoy benefits of electricity. The Commission desires that the State Governments should take steps to see that villages are enabled to utilize to the best advantage the large blocks of power that would be made available under the Plan.

To secure interstate co-operation and to co-ordinate the requirements of different States is the task of the Central Water and Power Commission. It is also to render assistance to the State Governments in respect of the planning, design and construction of irrigation and power projects. The cost of construction, maintenance and operation of the projects under the Plan is considerably heavier than that incurred by the State Governments for their past projects. The Commission has, therefore, recommended to the State Governments the desirability of levying betterment fee or a share in the unearned increase in land values as a result of irrigation facilities; such a step besides assisting in the financing of the projects, would also discourage speculation in land. In the past, irrigation works have been financed by public loans raised for the purpose and they have yielded net direct revenue. Though such a policy is justified in view of its satisfactory results, it has certain drawbacks. In periods of depression, it would be difficult to raise loans. Further, projects taking a long period of several years for completion need a guarantee of the supply of funds from year to year; no such guarantee would be forthcoming under such a policy. The Commission has, therefore, recommended the creation of a non-lapsable Irrigation Development Fund from which all expenditure on irrigation and power projects should be met. To this Fund, each State should contribute a definite sum of money every year either from general revenues or loans; the loans and grants from the Central Government and the proceeds of betterment levy would supplement the amount of the Fund.

Above all the success of major irrigation and power projects under the Plan depends on the public enthusiasm and co-operation secured in their implementation. Response of the public to the levying of the betterment fee so necessary for financing such projects, should be a satisfactory one. A large measure of public co-operation is also necessary for making the most economic use of the available irrigation supplies. The people should feel that the project is their own and and should be willing to make sacrifices for getting it completed. In this connection, the practice of employment of villagers themselves on the construction of canals in their own villages is worthy of emulation.

## THE PROGRESS OF THE PLAN

*Foodgrains* : The Grow More Food campaign came to be organised ~~in 1943.~~ In 1951-52, ~~it was integrated with the Five Year Plan.~~ In 1952, the Grow More Food Enquiry Committee conducted a review of the campaign. The Committee emphasised the need for intensifying effort on permanent schemes of minor irrigation, for setting up a National Extension Service and for ensuring the supply of agricultural credit in rural areas in an increasing measure. The schemes undertaken under the Grow More Food campaign cover an extension of area under cultivation as well as a more intensive cultivation of existing area. In addition to schemes such as irigation and land improvement works which have a permanent improvement effect, measures are taken for the distribution of improved seeds, fertilisers and manures.

In areas where ground-water supplies are adequate, the construction of tube-wells is sponsored by States. For sinking new wells and repairing old wells, the necessary financial assistance is given to cultivators. Of the land improvement schemes, the most important one is that of bringing back weed-infested land under cultivation. This work is done mainly by the Central Tractor Organization which has done good work in U.P., Madhya Pradesh, Bhopal and Madhya Bharat. In various states, the State Tractor Organizations undertake, on behalf of the cultivators, mechanical cultivation and land reclamation. The Grow More Food campaign also undertakes schemes of land improvement relating to contour bunding and soil conservation. Under the Five Year Plan, a target of 7.6 million tons of additional food production is aimed at by the end of 1955-56 over the food production in 1949-59, *viz.*, 46.02 million tons. On account of adverse seasonal conditions over large areas in the country in 1950-51 and 1951-52, the food production in these two years was 41.74 and 42.44 million tons respectively. During 1952-53, however, the weather was generally fair and the food production went up to 47.58 million tons. The figures of imports of foodgrains indicate an improvement in the food situation; in 1952, the imports declined to 3.9 million tons from the corresponding figure of 4.7 million tons in 1951. For 1953, the target is 2.9 million tons; of this quantity, 1.5 million tons are accounted for by wheat under the International Wheat Agreement. The trends in food production and imports cannot, however, be said to reflect the achievements of the schemes undertaken under the Grow More Food campaign; for, the food production in any single year is mostly influenced by the monsoons and particularly so as hardly twenty per cent of the area receives the benefits of irrigation. Government commitments under rationing and procurement of foodgrains decide the extent of imports. The total financial allotment for the Grow More Food schemes over the five-year period is Rs. 125 crores, special grants are also given for minor irrigation works. During the two years, 1950-51 and 1951-52, combined, the construction of new wells and repairs to old wells, the construction and improvement of tanks and the construction of irrigation tube wells numbered 115, 4 and 2 thousands respectively; the target for 1952-53 is 47, 1 and 2 thousands respectively. For the same two years combined, the number of acres cleared and reclaimed by the Central Tractor Organization the corresponding number dealt with by the State Tractor Organisations, the number of acres under mechanical cultivation and the number of acres under contour bunding and soil conservation were 537, 981, 138 and 740 thousands respectively; the target for 1952-53 is 235, 149, 65 and 104 thousands, respectively. As regards the supplies of manures and fertilisers, the figures for the same two years combined were 293 thousand tons fo3 fertilisers 2, 311 thousand tons for urban compost and 16r thousand tons for oil-cake and bonemeal. The respective targets for 1952-53 are 282, 1810 and 56 thousand tons. The supplies of improved cereal seeds in 1950-51 amounted to 56 thousand tons, as against 85 thousand tons in 1951-52 and the target of 95 thousand tons in 1952-53. As a result of the execution of the works referred to above and the distribution of supplies of manure and improved seeds, the additional production expected to be attained in 1950-51 over 1949-50 was 8.75 lakh tons while that expected to be attained in 1951-52 over 1950-51 was 9.85 lakh tons; the corresponding target for 1952-53 is 12.41 lakh tons. Out of the additional production of 7.6 million tons proposed under the Plan, nearly 5.6 million tons are to be accounted for by the G.M.F. schemes, the balance being expected to be achieved through major irrigation works.

*Cotton* : In the early years of the second World War, there was brought a surplus of cotton in the country on account of the loss of the Japanese market. Acute shortage of foodgrains was the other pressing problem. During the later years of the war period, therefore, from 1942 onwards, measures were taken to reduce the acreage under short staple cotton and to divert the area to foodgrains. After Partition, however, an altogether different situation arose. The production of cotton in 1948-49 was just 17.67 lakhs of bales, each of 392 lbs. as against the corresponding figure of 41.46 lakhs as the pre-war average for 1936-37 to 1938-39. The loss of raw cotton supplies tended to threaten our cotton mill industry with frequent unemployment. Devaluation of the Indian rupee resulted in making the situation still more difficult. To remedy the situation, therefore, the Cotton Development Scheme was formulated by the Government of India in 1950-51. Under the Plan, the target for the five-year period ending 1955-56 has been set at an additional production of 12.6 lakh bales over 1950-51 when it was 29.10 lakh bales. The requirements of the country are about 54 lakh bales including the long staple varieties which are generally imported. Weather conditions were not favourable for cotton cultivation during 1951-52 and 1952-53 with the result that in spite of the efforts made under the Cotton Development Scheme, only a slight rise in production was recorded. The figures for these two years were 31.33 and 30.50 lakh bales respectively. Under the Cotton Development Scheme, the most important incentive provided is the maintenance of prices of cotton at levels conducive to increasing its production. In 1949-50, the ceiling price of basic jarilla was Rs. 620 per candy; it was raised to Rs. 770 in 1950-51 and to Rs. 820 in 1951-52. In 1952-53, its floor price was also raised to Rs. 550 from Rs. 495 in 1951-52. In December 1952, permission was granted to start hedge trading in cotton under certain conditions. The grants and loans sanctioned in 1951-52 for the Cotton Development Scheme amounted to Rs. 62 lakhs in 1952-53, the figure was Rs. 75 lakhs while the budget provision for 1953-54 is Rs. 43 lakhs. In 1950-51, all legislative and executive restrictions on the growing of cotton imposed earlier were removed. Cotton extention staff is appointed to do propaganda and to give technical advice to growers. To meet the distribution cost, a subsidy is given on the supply of fertilisers; loans are granted for the purchase of ammonium sulphate and improved cotton seeds:

special irrigation facilities are extended to areas under cotton cultivation.

*Jute*. The jute economy has been seriously affected by Partition. While almost all the jute mills are situated in the Indian Union, nearly four-fifths of the raw jute is grown in Pakistan. The problem is of particular significance, as jute has been our principal foreign exchange earner. Imports from Pakistan have not been regular; the devaluation of Indian rupee made the import prices of raw jute from Pakistan prohibitive. Under the Jute Development Scheme, efforts are being made to increase our jute production. Under the Plan, the target for the five-year period ending 1955-56 has been set at an additional production of 20.9 lakh bales over the 1950-51 production of 32.83 lakh bales, each bale being of 400 lbs. The gross target will thus be about 54 lakh bales as against our requirements of 72 lakh bales. During 1951-52 and 1952-53, jute production has recorded a substantial rise to 46.78 and 46.95 lakh bales respectively, the gap to be made up by the end of the five-year period is thus now 7 lakh bales only. The main factor that has led to the rise in production has been the level of prices. The decontrol of jute in March, 1951 resulted in a rise in prices which acted as an incentive to increased production. During the calendar year 1952, however, a declining trend in the prices was noticeable; to arrest it, the Government of West Bengal banned the fatka markets in hessian in December 1952. The grants and loans sanctioned in 1951-52 under the Jute Development Scheme amounted to Rs. 16 lakhs; the corresponding figures for 1952-53 and 1953-54 are Rs. 12 lakhs and Rs. 19 lakhs respectively. The removal of legislative restrictions imposed earlier on jute cultivation, the setting up of seed multiplication farms, the distribution of improved seeds at subsidised rates, the grant of loans to meet the cost of fertilisers, the appointment of jute extension staff to demonstrate the method of line sowing to the farmers, and the attempts to increase the area under jute cultivation by growing jute on fallow lands are some of the important steps taken under the Jute Development Scheme.

*Sugarcane.* Under the Plan, the target for additional production of sugarcane has been set at 7 lakh tons in terms of raw sugar or gur over the 1950-51 production of 56.15 lakh tons. The major part of the sugarcane produced in the country is used for the manufacture of gur; about a fifth is used for producing crystal or factory sugar. To step up production of sugarcane and to ensure adequate supplies of cane to sugar factories for the manufacture of sugar, the Sugarcane Development Scheme has been launched by the Indian Central Sugarcane Committee. During 1951-52 and 1952-53, the expenditure incurred by the Committee for this purpose was Rs. 9 lakhs and Rs. 11 lakhs respectively; for 1953-54, the provisional figure has been Rs. 33 lakhs. The extension of adequate irrigation facilities, the supply of adequate quantities of disease-free and improved varieties of seeds, an adequate supply of manures and fertilisers, the appointment of the sugar extension staff and an efficient watch and ward service for protection of the crop against pests and diseases are the major high lights of the Scheme.

*Oil-seeds.* Under the Plan, the target of additional production for the five-year period ending 1955-56 has been set at 4 lakh tons over the production of 50.78 lakhs tons in 1950-51. In 1951-52, there was recorded a certain decline to 47·91 tons on account of adverse seasonal conditions. India is one of the world's largest producers of oilseeds. The important oilseeds produced in the country are groundnuts, linseed, rape, mustard, seasamum and castor seed, of which groundnut is by far the most important one. The country leads the world in the production of groundnuts. During recent years, the demand for oilseeds, both internal and export, has increased considerably without, however, a commensurate rise in their production in the country with the result that their exports which earn valuable foreign exchange, have recorded a decline. The India Central Oilseeds Committee has been entrusted with the task of raising home production. The Committee gives grants to State Governments to facilitate research in the improvement of seeds and finances schemes for the development of oilseeds cultivation. The expenditure incurred by the Committee in 1951-52 was Rs. 2 lakhs, in 1952-53, it was raised to Rs. 3 lakhs and in 1953-54, the provisional figure has been further raised to about Rs. 6 lakhs.

## LAND RECLAMATION BY CENTRAL TRACTOR ORGANISATION

Under the Plan, a total area of 1.4 million acres is proposed to be reclaimed during 1951-52 to 1955-56. A sum of Rs. 10.22 crores has been provided towards expenditure on Central Tractor Organisation. The Central Tractor Organisation recovers the cost of the operations from individual cultivators through State Governments on an instalment basis and works on a 'no-profit no-loss' basis. In 1951-52, the area reclaimed by new tractors was 2.35 lakh acres, in 1952-53, it was 2.44 lakh acres.

## KEY VILLAGES

To ensure all-round cattle improvement, the 'Key-Village Scheme' for improving the breed and productive capacity of cattle is being implemented under the Plan. A sum of Rs. 3 crores is provided by the Central Government under the Plan and it is proposed to set up 600 key village centres, 150 artificial insemination centres and 225 bull rearing farms. Old and unproductive cattle are segregated by transferring them to *Gosadans* or 'segregation camps'. A sum of a crore of rupees is provided by the Central Government for establishing 160 *Gosadans*; the provision for the scheme to vaccinate compulsorily all the animals with the anti-rinderpest vaccine being Rs. 16 lakhs. A key village area comprises of a group of villages with a specified cattle population. During 1952-53, sanction was given for 222 key villages and 96 artificial insemination centres; for 1953-54, the corresponding provisional figures are 292 and 31 respectively.

## SOIL CONSERVATION

The provision made by the Central Government under the Plan for this purpose is Rupees two crores. So far three schemes expected to cost about Rs. 54 lakhs are being implemented. To arrest the insidious spread of the Rajputana desert, the Desert Afforestation Research Station has been established at Jodhpur. A Soil Conservation Branch at the Forest Research Institute, Dehra Dun has been set up. The third scheme has been the setting up of six Research and Demonstration Centres in the different States.

## GRADING AND FUMINGATION

To ensure that the agricultural produce exported is properly graded according to quality, the Central Government has launched a scheme costing Rs. 86 lakhs under the Plan. The scheme for compulsory grading of hemp has been in operation since 1942, while that for tobacco was implemented in 1945. These schemes have proved a great success. The scheme for the grading of wool bristles and goat hair has been sanctioned for 1953-54 while that for lac, tanned leather, goat and sheep-skin will follow next. To prevent infestation of agricultural produce exported, fumigation is necessary. For this purpose, the Central Government has sanctioned Rs. 17.4 lakhs for the last three years of the Plan and has formulated a scheme of setting up special fumigation plants at the ports of Bombay, Calcutta and Madras. The cost of the scheme, which is to work on a 'no-profit, no loss' basis, is to be covered by levying a fee for the fumigation service.

## OTHER CENTRAL GOVERNMENT SCHEMES

To rehabilitate landless agricultural workers, a sum of Rs. 2 crores is provided. Formation of co-operatives is to be encouraged; arrangements to settle the workers on newly reclaimed land or culturable waste land are proposed under the scheme. As a basis for setting up an Agricultural Extension Organisation for undertaking intensive rural work, fifteen pilot development projects were initiated last year in collaboration with the Ford Foundation of the U.S.A. Fifty-five community development projects financed jointly by the Governments of the U.S.A. and India under the Indo-U.S. Technical Co-operation Programme were also launched last year. Between 1953-54 and 1955-56, it is proposed to have 900 National Extension Blocks and by 1960-61, the entire country is to be covered by the National Extension Service. To provide trained personnel to administer and guide the co-operative movement, a sum of Rs. 50 lakhs has been provided. The States are to be encouraged to undertake the training of subordinate personnel employed in the Government departments as well as in non-official bodies. The Reserve Bank of India is to undertake the responsibility of imparting training of intermediary and higher grade personnel. To supplement the resources of the Indian Council of Agricultural Research, a provision of Rs. 88 lakhs is made. To store imported foodgrains, the completion of construction by 1953-54 of Food Storage Godowns at Bombay, Madras, Cochin, Calcutta and Vishakhapatam with a total capacity of 2 lakh tons and costing Rs. 125 lakhs, is proposed. To assist research and development of fisheries, a sum of Rs. 50 lakh has been provided; a part of this work is financed under the Indo-U.S. Technical Co-operation Programme.

## SELECTED BIBLIOGRAPHY

1. A Hundred Years of Economic Development in Great Britain by Jones and Pool.
2. Economic History of Europe by Heaton.
3. Soviet Economic Development since 1917 by Maurice Dobb.
4. A Short Economic History of Moderm Japan by G.C. Allen.
5. Japan, Overseas Economic Surveys, H.M.S.O. London.
6. An American Experiment by Hugh-Jones and Radice.
7. U.S.A. Overseas Economic Surveys, H.M.S.O. London.
8. The First Five Year Plan, Planning Commission, Government of India.
9. Agricultural Situation in India, Ministry of Food and Agriculture, Government of India.

## CHAPTER II

# TRADE

## FOREIGN TRADE OF INDIA

### 1914—1919

The outbreak of the war, checked trade in the beginning. The fall of trade with the enemy countries was partially balanced by increased demand for Indian products like raw jute, cotton piece-goods, iron and steel goods, wolfram, mica, saltpetre, wheat, etc.

The war affected our imports as well as exports as can be seen from the following figures :

*(In crores of rupees)*

| Year | Imports | Exports | Total |
|---|---|---|---|
| 1913-14 | 183 | 244 | 427 |
| 1914-15 | 137 | 195 | 332 |
| 1915-16 | 105 | 187 | 292 |
| 1916-17 | 88 | 202 | 290 |
| 1917-18 | 71 | 187 | 258 |
| 1918-19 | 63 | 160 | 223 |

This progressive fall in our foreign trade was due to the stoppage of trade with foreign countries and the severe curtailment of the same with the neutral countries. The war brought in its wake a serious shortage in shipping space.

The purchasing capacity of the belligerents was greatly reduced due to the destruction caused by the war. Seaborne trade became risky on account of the enemy submarine activity and the temporary absence of most insurance companies from this field. The general shortage, as well as the strict control of foreign exchange also affected the volume and value of India's trade during the war. In 1918-19 the rupee sharply rose in value, thus making difficult any kind of trade calculations. This coupled with the epidemic of influenza and the widespread failure of the monsoon made matters worse for Indian exports. This unstable situation was aggravated by increased speculative activity which was ushered in by the Armistice.

During the war period the total trade fell by about 50 per cent; but the fall in imports was greater than the fall in exports. The share of the empire countries in our trade, no doubt, diminished, but the fall in the U.K.'s share of our imports was more severe. The U.S.A., Japan and Java gained at the cost of the U.K. and the empire countries. In exports, the share of the empire was on the increase, a large proportion being contributed by the U.K. and Egypt. Japanese cotton exports competed successfully with those of the U.K. Japan also increased her exports of silk goods to India. For a temporary period at the end of the war, the U.K. had lost her hold on the metal manufactures imported by India. The share of the U.S.A. in our oil imports and that of Java in our sugar imports increased, and in the latter case it was done at the expense of the empire countries.

While Japan increased her exports of cotton textiles to India, she also increased enormously her purchases of Indian raw cotton. During the war, there was a sudden and large rise in the empire purchases of our oil-seeds, rice and wheat. The U.K: bought more tea from India during this period but her off-take of our skins and hides was suddenly increased.

While our exports of cotton goods to China fell, the share of the empire in our jute exports increased suddenly.

Thus, India's participation in the war affected her trade adversely. Our imports and exports fell. The falling exports were arrested partially by the stimulus which the war afforded to the export of war necessaries. The war resulted in rising prices and thus raised the money value of a falling volume of trade. The inflow of gold and silver was checked in the war years. These years were marked by a spirit of speculation and rise of the foreign exchange.

### 1919—1929

The growth of India's foreign trade can be seen from the following table.

*(In crores of rupees)*

| Year | Imports | Exports | Total |
|---|---|---|---|
| 1919-20 | 221.7 | 336.0 | 557.7 |
| 1920-21 | 347.6 | 267.8 | 615.4 |
| 1921-22 | 282.6 | 248.6 | 531.2 |
| 1922-23 | 246.2 | 316.1 | 562.3 |
| 1923-24 | 237.2 | 363.4 | 600.6 |
| 1924-25 | 253.4 | 400.2 | 653.6 |
| 1925-26 | 236.0 | 386.8 | 622.8 |
| 1926-27 | 240.8 | 311.0 | 551.8 |
| 1927-28 | 261.5 | 330.3 | 591.8 |
| 1928-29 | 263.4 | 339.1 | 602.5 |
| 1929-30 | 249.7 | 319.0 | 568.7 |

In this period we had a negative balance of trade in 1920-21 and 1921-22. There was a declining tendency in the balance of trade from 1925-26. Over the period 1919-20 to 1928-29 our exports rose by about Rs. 3 crores and our imports rose by Rs. 41 crores. The exports of manufactured products, *e. g.*, jute and woollen goods, metal products, oilseeds products and the manufactures from hides and skins increased. Another feature of our trade was the greater proportion of foodstuffs in total exports. Raw and manufactured silk, cotton twist and yarn, and indigo suffered as exports due to intensified foreign competition, rise of substitutes and defective nature of Indian goods. Indian raw materials were popular abroad but their growing exports proved detrimental to the home industries, *e. g.*, the cotton, iron and steel, chemical and leather industries which suffered diminution in their supplies.

India still depended on large shipments of textile goods, machinery, iron and steel goods, chemicals, other industrial accessories, kerosene and petrol and even sugar. However, it must be noted that in this period India imported only those manufactured goods which she did not produce and in general the importance of manufactured goods in the imports was on the wane.

Before the first World War, India ranked very high among world importers. After the war, China and Japan emerged as bigger markets. Manufactures dominated the imports of India, while during this period, the proportion of food stuffs and raw materials to total imports was greater than that of manufactured goods, in the case of the U.S.A., Japan and European countries. Thus, there was a severe competition for the Indian market which constituted the biggest market for manufactures. This competition was, however, affected by the rise of the spirit of Swadeshi, the low purchasing power and the low standard of living of the Indian masses, the growth of certain Indian industries under the protection given by the Government, and the policy of the Government of giving preferences to Indian-made goods for its stores requirements.

### DIRECTION OF TRADE

*(As a percentage of the total)*

| | Pre-war average | War average | Post-war average | 1929-30 |
|---|---|---|---|---|
| Foreign countries ... | 47.7 | 42.9 | 47.7 | 57.5 |
| British Empire | 52.3 | 57.1 | 52.3 | 42.5 |
| U.K. ... | 40.0 | 41.2 | 39.5 | 30.9 |
| Japan ... | 5.5 | 10.9 | 10.4 | 10.0 |
| U.S.A. ... | 5.8 | 9.9 | 10.4 | 10.1 |
| Germany ... | 8.5 | 0.8 | 4.0 | 7.6 |
| France ... | 4.6 | 3.2 | 3.0 | 3.8 |
| Belgium ... | 3.9 | 0.4 | 2.9 | 3.4 |
| Java ... | 3.3 | 3.8 | 3.7 | 3.2 |

Even before World War I the share of the U.K. in Indian trade was declining. The U.K. lost importance in our foreign trade in the decade following the war. Japan and the U.S.A. had not entered the field of Indian trade merely temporarily during the absence of others. The gains made by these two countries were maintained even after the Armistice. Belgium and France recorded some gains but could not achieve their pre-war importance in India's foreign trade. The pre-war tendency of the expansion of non-empire trade at the expense of the empire continued and the loss of the U.K. and the empire can partly be explained by the establishment of direct trade connections between India and foreign countries and also by the abandonment of the practice of trading through the U.K.

In the postwar period, India's adverse balance of trade with the U.K. was accentuated. Except for the U.K., Java and Austria, India enjoyed an increasingly favourable balance with other countries.

1929—1939

*(In crores of rupees)*

| Year | Imports | Exports | Total |
|---|---|---|---|
| 1929-30 | 249.7 | 319 | 569 |
| 1930-31 | 165 | 220 | 385 |
| 1931-32 | 126 | 156 | 282 |
| 1932-33 | 132 | 132 | 264 |
| 1933-34 | 115 | 147 | 262 |
| 1934-35 | 132 | 152 | 284 |
| 1935-36 | 134 | 161 | 295 |
| 1936-37 | 125 | 196 | 321 |
| 1937-38 | 173 | 118 | 354 |
| 1938-39 | 152 | 163 | 315 |

The world-wide crisis could not fail to engulf India. The unprecedented fall in prices began from November 1929. This brought about a disequilibrium in the international trading system, by severely contracting the volume of world commerce. The world witnessed growing adherence of nations to policies of extreme economic nationalism, which were evidenced by the erection of higher tariffs, import quotas, exchange restrictions, requisitions, priority systems, control of exports and imports, price fixation, governmental monopolies, etc. It must be noted here that in this crisis, India was not free to determine her own foreign trade policy, but being tied to the U.K., the effects of the crisis on her trading relations were determined by the foreign economic policy of the U.K.

During this period, the world got divided into newer trading groups quite different in aims and purposes from those before the slump. The world was divided into groups such as the gold bloc and the sterling bloc. These were divisions on the basis of currency. There were also divisions based on geographical or political affinities, *e.g.*, the British Empire, the Central European combination under the Nazis, the French Empire, the Pan-American Bloc, etc. In the U.K. the political winds had been blowing since the close of the last century towards imperial economic co-operation, and this trend was now accentuated by the aim of making the empire a self-sufficient economic unit. These attempts led to an increased control of the U.K. over India's foreign trade and the increased competition between the U.K. on the one hand and the U.S.A., Japan, Germany, Belgium, etc., on the other, in the Indian markets. Canada, as a member of the Commonwealth and as a neighbour of the U.S.A. was being increasingly sought after for co-operation by both the U.K. and the U.S.A. Indian foreign trade interests were tied securely to those of the empire by the Ottawa Agreement of 1932. Agreements between India and Burma and India and Japan were also concluded. Foreign trade based on these agreements suited very well the interest of the Empire.

DIRECTION OF TRADE

*(as a percentage of the total)*

| Countries | 1928-29 | 1930-31 | 1932-33 | 1934-35 | 1935-36 |
|---|---|---|---|---|---|
| U.K. | 21.4 | 23.8 | 28.0 | 31.6 | 31.5 |
| Germany | 9.6 | 6.4 | 6.5 | 6.5 | 5.9 |
| Japan | 10.2 | 10.6 | 10.3 | 16.1 | 13.4 |
| U.S.A. | 11.8 | 9.4 | 7.4 | 8.3 | 10.1 |
| France | 5.3 | 4.9 | 6.0 | 3.2 | 4.4 |
| Belgium | 4.0 | 3.4 | 3.0 | 2.6 | 3.4 |
| Ceylon | 4.2 | 5.0 | 5.0 | 4.5 | 4.5 |
| Persia, Arabia | 2.1 | 2.2 | 2.2 | 1.9 | 1.7 |
| Italy | 4.5 | 3.5 | 3.5 | 3.8 | 2.2 |
| China | 2.8 | 5.9 | 2.6 | 1.9 | 1.1 |
| Cen. & S. Africa | 3.3 | 2.3 | 2.8 | 2.6 | 2.0 |
| Netherlands | 2.6 | 3.4 | 3.0 | 1.9 | 2.3 |
| Australia | 2.2 | 2.0 | 2.9 | 1.9 | 1.8 |
| St. Settlements | 2.4 | 2.8 | 2.7 | 1.8 | 2.3 |

Excepting the U.K., Japan and Ceylon, whose share in our foreign trade increased by 1935-36, other countries did not fare well in India's foreign trade during this period. As a result of the Ottawa Trade Agreement, the share of the British Empire as a whole in our trade increased. We had to give preferential treatment to the British and British Empire goods. The share of the U.K. has been rising especially from 1932-33. Our European markets were lost after 1929-30 and their recovery later was very slight. The loss of our European markets was due to exchange controls, tariffs, currency instabilities, quotas and bilateral pacts. Some of the European countries even took measures against India's alignment with the Empire countries by the Ottawa Agreement. There was a sharp fall in Indian exports to the U.S.A. Here again the recovery was slow on account of our competitors capturing the American market after the Ottawa Agreement. The fall in our exports to the U.S.A. is also explained by the currency difficulties of the U.S.A and the attempts towards self-sufficiency by that country. Between 1929-30 and 1932-33 our exports to Japan fell from Rs. 33 crores to Rs. 14 crores. Japan was depreciating her currency and was thereby attempting to dump her goods in the Indian market. India terminated the Indo-Japanese Trade Convention of 1905. Japan replied by boycotting Indian cotton. The Indo-Japanese Trade Treaty of 1934, however, resulted in a speedy recovery of Indian exports to Japan from 1934-35.

From 1933-34 recovery started in India, as elsewhere in the world. In spite of several obstructions in the way of international trade our exports were now definitely on the way to recovery. By 1936, the world was definitely out of the worst conditions of the depression. The world recovery was due partly to the recovery measures of the New Deal in U.S.A. and similar other measures, including the devaluation of gold currencies, undertaken by other countries. Prices of food products and raw materials rose due to restriction and regulation schemes. In India, the jute and tea manufacturers adopted regulatory measures in production by which these industries were saved. The stimulus to heavy industry under the stress of the Nazi fear also aided recovery. The Ottawa Agreement of 1932 did help India maintain her exports to a certain extent. Similarly, the Indo-Japanese Trade Agreement of 1934 improved Indo-Japanese trade relations. As prices increased, the value of Indian exports began to rise.

From the beginning of April 1937, a business recession spread from the U.S.A. to other countries. This was due to the bursting of the speculation bubble, bottlenecks in the supply of raw materials, credit restriction by banks and general relaxation of the restriction schemes. By the end of 1938 the recession had passed and the year 1939 began with increased business activity as a result of policies of monetary expansion and increased public expenditure on armaments.

With the spread of the recession and the reversal of the commodity boom, the prices of Indian staples declined sharply. Business activity in India was also checked by the Sino-Japanese War and the prospects of a World War. During the recession Indian exports suffered considerably and the favourable balance of trade was substantially reduced. In the years 1934, 1935 the U.K. had increased her share in our imports considerably but this short-lived recovery came to an end in 1938; the imports from the U.K. in that year being the lowest since 1900. It must be noted that the fall in the share of the U.K. in our import trade was not made good by the non-empire countries. This gap was filled in by some of the empire countries, which gained even at the expense of some non-empire countries. However, our exports to the U.K. were on the rise. At the end of the period under consideration Japan was losing ground in our exports.

The U.K. lost precipitately in her exports of cotton manufactures to India. In 1939 and 1940 these exports were lowest on record since 1900. Non-empire countries gained in the exports of metal manufactures to India at the expense of the U.K., while the empire countries gained at the expense of the U.K. in the matter of metal exports to India. From 1933, the U.S. exports of mineral oil to our country have been continuously falling. Java almost went off the Indian market in sugar. During the period under review the share of the U.K. in India's raw cotton exports was the highest since the beginning of this century. Her purchases of our jute were maintained and those of oilseeds increased. While the position of tea exports remained unchanged, rice exports went more to the empire countries. From 1900 to 1939, the direction of our hides and skins exports remained remarkably unchanged.

## A NOTE ON INDIA'S FOREIGN TRADE DURING 1914-1939

Before we review the development of India's foreign trade after 1939, it will not be out of place to say a few words about the period between 1914-1939. In this period, the development of our foreign trade exhibited the characteristics of a primary production economy. We exported mainly raw jute, cotton, tea, oilseeds, hides and skins and jute and cotton manufactures. These goods were exported to a small range of markets. On the other hand, we imported a large number of commodities, which mainly included machinery, equipment and consumers' goods. By 1939, India's percentage share in the total exports of the world was only 2.9.

During the inter-war period India could not maintain the rate of expansion of foreign trade which was witnessed before 1914. While in the mid-twenties our foreign trade was brisk, its level fluctuated frequently. With the coming of the depression our foreign trade declined both in value and volume and the recovery in the mid-thirties was only slight. The depression made our balance of trade less favourable and even negative. From 1931 onwards India exported annually huge quantities of gold to add to our merchandise balance on the credit side.

A close study of the trade development suggests the extent of industrialisation in the country. Through the years between 1914 and 1939 our imports of manufactured goods have progressively decreased and their exports have increased. Similarly, we have been importing more raw materials and semi-finished goods, while their exports have been on the decline.

At the beginning of the first World War, the U.K. held a position of great importance in our foreign trade. Her importance gradually declined on account of our industrial progress, as well as a keen competition in our markets from Japan, Germany and the U.S.A. A noticeable characteristic feature of our inter-war trade is the growing share of the Commonwealth countries in our exports. This is ascribed to the imperial preference, changed pattern of Indian imports, general trend towards bilateralism and the fall in exports of British capital to India in the early thirties.

## INDIA'S FOREIGN TRADE DURING THE SECOND WORLD WAR

The second World War had a profound effect on our foreign trade. In contrast to the first World War, we find that India was isolated from the rest of the world to a greater extent. The second World War created a problem of marine defence and also of shipping space. Our foreign trade was greatly affected by the war.

WAR-TIME TRADE
*(In crores of rupees)*

| Year | | | Imports | Exports | Total |
|---|---|---|---|---|---|
| 1939-40 | ... | ... | 161 | 213 | 374 |
| 1940-41 | ... | ... | 157 | 187 | 344 |
| 1941-42 | ... | ... | 173 | 237 | 410 |
| 1942-43 | ... | ... | 110 | 187 | 287 |
| 1943-44 | ... | ... | 118 | 199 | 317 |
| 1944-45 | ... | ... | 204 | 210 | 414 |

The above figures are a sufficient indication of the damage done to our foreign trade by the war. However, these figures are not complete due to the omission of figures for imports on Government accounts, defence imports, lend-lease goods, purchases by the railways, etc.

The fall in our foreign trade was due to the strict control on exports and the foreign exchange market, the loss of markets in Italy, France, Belgium and Sweden and the Far Eastern markets after the entry of Japan into the war. Further difficulties were caused by shipping shortages, the dangers to navigation due to the German U-boat activity and the diversion of trade through the longer Cape of Good Hope route. Our imports from the U.K. and the U.S.A. fell precipitately as they had to cater first to war necessities. The war affected our imports to a greater extent than the exports. At the end of this period, however, the value of our imports rose due to the availability of increased shipping space.

The composition of India's foreign trade during the war time can be seen from the accompanying tables. They reveal characteristics similar to those of a country, which is making an industrial progress. While the percentage manufactures imported into the country was 60.8 in 1938-39, in 1945 it was only 35.6. Similarly, the percentage of food imports declined from 15.17 to 9.2 in the same period, and the percentages were as low as 6.9 and 6.8 in 1942-43 and 1943-44 respectively. If we examine our exports, we find that exports of manufactures increased from 30% in 1938-39 to 50.4% in 1943-44, while the exports of foodstuffs remained almost steady. We cannot, however, jump to the conclusion that this pattern of our composition of trade was entirely due to the progress of industrialisation. It must be noted that there was a large cut in our imports during the war years. Before the war, nearly 61% of our imports consisted of manufactured goods. On account of shortage of shipping space and war demand these manufactures coming from foreign countries were simply not available for India.

The changes in the composition of our export trade are explained by the fact that India was used as a supplier of certain categories of manufactured goods to the different war theatres. Under normal peace-time conditions, the increase in the exports of manufactures may be taken to be a sign of the industrial strength of the country. We, however, cannot legitimately draw such conclusions from the war-time pattern of our foreign trade. This pattern was the result of an elaborate system of export-import controls and also to several extra-economic factors.

During the war years India continued to have a favourable balance of trade as will be revealed from the table given on page 95.

INDIA'S WAR-TIME IMPORTS.

*(In crores of rupees)*

| Year | Foodstuffs | Raw materials | Manufactures |
|---|---|---|---|
| 1938-39 | 24.00 | 33.18 | 92.79 |
| % age | (15.17) | (21.7) | (60.8) |
| 1939-40 | 35.29 | 36.13 | 91.81 |
| % age | (21.4) | (21.9) | (55.5) |
| 1940-41 | 23.81 | 42.10 | 89.51 |
| % age | (15.2) | (26.8) | (57.0) |
| 1941-42 | 27.84 | 50.05 | 93.65 |
| % age | (16.1) | (28.9) | (54.1) |
| 1942-43 | 7.62 | 51.95 | 49.52 |
| % age | (6.9) | (47.0) | (44.8) |
| 1943-44 | 8.13 | 63.94 | 45.12 |
| % age | (6.8) | (53.8) | (38.0) |
| 1945 | 21.75 | 128.05 | 84.47 |
| % age | (9.2) | (54.0) | (35.6) |

## INDIA'S WAR-TIME EXPORTS

*(In crores of rupees)*

| Year | Foodstuffs | Raw materials | Manufactures |
|---|---|---|---|
| 1938-39 | 39.43 | 76.28 | 50.72 |
| % age. | (23.3) | (45.1) | (30.0) |
| 1939-40 | 40.66 | 91.53 | 79.08 |
| % age | (19.0) | (42.9) | (37) |
| 1940-41 | 42.39 | 68.33 | 85.83 |
| % age | (21.3) | (34.4) | (43.1) |
| 1941-42 | 60.44 | 73.04 | 115.08 |
| % age | (23.9) | (28.9) | (45.5) |
| 1942-43 | 48.61 | 45.21 | 98.33 |
| % age | (25.0) | (23.2) | (50.5) |
| 1943-44 | 48.41 | 53.73 | 105.89 |
| % age | (22.9) | (25.6) | (50.4) |
| 1945 | 53.25 | 75.75 | 105.31 |
| % age | (22.3) | (31.7) | (44.0) |

*(In lakhs of rupees)*

| Year | Exports, including re-exports | Imports | Balance of Trade in private merchandise |
|---|---|---|---|
| 1938-39 | 1,69,21 | 1,51,83 | +17,38 |
| 1939-40 | 2,13,57 | 1,64,76 | +48,81 |
| 1940-41 | 1,98,69 | 1,56,72 | +41,97 |
| 1941-42 | 2,52,88 | 1,72,86 | +80,02 |
| 1942-43 | 1,94,70 | 1,10,39 | +84,31 |
| 1943-44 | 2,09,99 | 1,19,05 | +90,94 |
| 1944-45 | 2,27,07 | 2,00,99 | +26,08 |

The direction of our trade during the war changed considerably from the pre-war pattern. Our trade with most of the European countries was completely stopped and wherever it did continue, it was carried on through Government agencies on a limited scale. The share of the empire countries increased in our foreign trade. Before the war, the balance of trade of India vis-a-vis the U.K. used to be negative. It became favourable during the war. The U.K. Government had to make huge purchases in the market for which rupee payments were made by the Government of India. The rupees were provided against the sterling promises of His Majesty's Government which accumulated with the Reserve Bank of India. India was able to repatriate her sterling debts to the U.K. and become a creditor of that country.

Before the entry of Japan into the war, her share in our imports increased by about 40 per cent. and her share in our exports decreased by 40 per cent. Our trade with Japan ceased after her entry into the war in 1941.

As compared with the beginning of the war, India's imports from the U.S.A. increased six times by the end of the war. Similarly, our exports to that country increased four times, during the war period. The war period also saw an improvement of our trade with the Middle East countries like Egypt, Iraq and Arabia. This is explained by the stoppage of Japanese supplies to them, as well as the Allied successes, in the Middle East. Except for Bahrein and Iran, which supplied India with oil, we built up a favourable balance of trade with the Middle East countries.

On the export side, the importance of raw jute, raw cotton, cotton waste and oilseeds diminished, while the position of cotton and jute manufactures improved. During the war, there was a significant increase in the import of vegetable and mineral oils. The imports of grain, pulse and flour and cotton manufactures practically disappeared. The imports of machinery also registered a decline from 13% (of the total value of imports) in 1938-39 to 6% in 1943-44.

## TRADE CONTROL

The Government of India controlled foreign trade transactions for obvious reasons through (*i*) export control (*ii*) import control, and (*iii*) the control of the foreign exchange market.

Export control was instituted by prohibiting exports to enemy countries; certain exports to even neutral countries were under the embargo. Exports of certain types of goods to neutral non-enemy countries were permitted under a licence from appropriate authority. Certain exports were, however, allowed to some specified countries without a licence.

From 1940 onwards the Government introduced an elaborate system of import restrictions. The purposes of these restrictions were to conserve the supplies of foreign exchange, to economise shipping space and the better and co-ordinated utilization of the productive capacity of the friendly nations for the successful prosecution of the war.

Foreign exchange control was instituted on the 9th March 1940 and continues even to this day. The Reserve Bank of India was appointed the exchange control authority. Its function was to ensure that the foreign exchange resources were disposed of in a manner approved by the Bank. The commercial and foreign exchange banks were prohibited from selling foreign exchange outside the Sterling Area without the sanction of the Reserve Bank. The latter would not approve of these transactions until it was fully satisfied, that India got something in return. Imports of certain commodities, including all luxury articles were prohibited. Imports were allowed only under licence which was refused if substitutes were obtainable within the country. Import licensing too facilitated foreign exchange control.

## INDIA'S FOREIGN TRADE FROM 1945 ONWARDS

As after the first World War, after 1945 also a trade boom was witnessed in our country. Although trade is not completely free, several of the war-time restrictions and controls were relaxed with the coming of the peace. India has concluded, since the end of the war, several bilateral trade agreements with a view to conserve foreign exchange and to secure essential goods from the soft currency countries. India is a signatory of the Havana Charter for an I.T.O. and also of the G.A.T.T. (General Agreement on Tariffs and Trade). India has now become an independent republic free to frame her own policies and programmes. With independence, the country was also partitioned which had its repercussions on the country's foreign trade. Another significant event affecting our trade has been the devaluation of the Indian rupee along with that of the pound sterling vis-a-vis the U.S. dollar.

From 1945 onwards, our trade has been continuously on the increase. In 1951-52, it was at its maximum of Rs. 1,565 crores. This is so far an all-time record in our foreign trade. In that year our imports, as well as exports were at the maximum. Our imports have a tendency towards a sharp fall after 1951-52. A similar tendency can be observed in our exports. While our exports policy has been more or less steady, the policy of imports has been subject to frequent changes, almost every year. Imports increased on account of the partition, relaxation of controls, necessity of importing machinery for replacement and reconstruction, and the need for food imports to meet the serious deficit at home.

## POST-WAR TRADE OF INDIA

*(in crores of rupees)*

| Year | | Imports | Exports | Total |
|---|---|---|---|---|
| 1938-39 | ... | 155 | 166 | 321 |
| ... | ... | ... | ... | ... |
| 1945-46 | ... | 240 | 240 | 480 |
| 1946-47 | ... | 315 | 281 | 596 |
| 1947-48 | ... | 396 | 399 | 795 |
| 1948-49 | ... | 527 | 416 | 943 |
| 1949-50 | ... | 560 | 460 | 1020 |
| 1950-51 | ... | 581 | 579 | 1160 |
| 1951-52 | ... | 863 | 702 | 1565 |
| 1952-53 | ... | 635 | 554 | 1189 |
| 1953-54 | ... | 542 | 516 | 1058 |

## BALANCE OF TRADE

*(in crores of rupees)*

| | | | | |
|---|---|---|---|---|
| 1938-39 | ... | ... | ... | +11 |
| ... | ... | ... | ... | ... |
| 1945-46 | ... | ... | ... | —0·1 |
| 1946-47 | ... | ... | ... | — 34 |
| 1947-48 | ... | ... | ... | + 3 |
| 1948-49 | ... | ... | ... | —111 |
| 1949-50 | ... | ... | ... | —100 |
| 1950-51 | ... | ... | ... | — 2 |
| 1951-52 | ... | ... | ... | —161 |
| 1952-53 | ... | ... | ... | — 81 |
| 1953-54 | ... | ... | ... | — 26 |

Since the outbreak of war in 1939, India had a favourable balance of trade. The foreign exchange at the disposal of the country was on the increase. Again, the sterling balances were mounting in favour of India. The foreign exchange position then was so strong that when it came to declare the rate of exchange to the I.M.F. India unhesitatingly selected the then existing rate of 1 sh. 6d. to the Indian rupee. Later on, after the war, India began to have an adverse balance of trade and in 1948-49 it was very heavy. We had not only an over-all adverse balance but also so with the sterling area. It was generally thought that India had no serious balance of payments problem, except with the dollar area. But now we had an adverse balance vis-a-vis even Pakistan. This was to the tune of 35 to 50 crores of rupees. In September, 1949 Great Britain decided to devalue the pound sterling. When the sterling-dollar rate changed, the Indian rupee could not maintain the same rate as before with both the dollar and the pound sterling. India decided to maintain the same old rate with sterling, which meant a devaluation to the same extent as the pound sterling in terms of the U.S. dollar (and therefore, also of gold).

In the matter of devaluation, there was no other course open for India. If India had not depreciated her rupee to the same extent as the sterling and the other currencies that followed the U.K., the rupee would have appreciated against them. India could not simply afford to take the latter course. In that case, our exports to the U.K., Australia, Ceylon, Egypt, Norway, Iraq, Sweden, etc., would have become suddenly expensive. These countries which had devalued would have demanded less of our goods. Thus, India could not take any independent line of action. When a number of other countries, which were our most important customers as well as our competitors in the export markets, had devalued, India had no option but to do the same.

In this connection it would be instructive to note the value to India of sterling area membership. Following are the important points made in this connection by Mr. C.D. Deshmukh, the Union Finance Minister, in a speech in the Lok Sabha, on March 15, 1954 :—

1. Over 50 per cent. of India's export trade and 30 per cent. of her import trade was with sterling area countries. Moreover, by her membership of the sterling area she was able to finance the deficit she normally had with member countries of the Organization for European Economic Co-operation through the European Payments Union in sterling.

2. India had sterling balances of the order of Rs. 7,450,000,000, and the stronger the British pound the better it was for India.

3. Whenever India needed convertibility of sterling that she held for purposes which were essential for her development, it was always granted to her.

4. Membership of the sterling area imposed no limitation on a country's freedom to pursue its own monetary policy.

5. If India had not been using her sterling balances, that was not due to anything overt or covert arising from membership of the sterling area, but due to unforeseen circumstances, namely, improvement in her agricultural production and consequent decrease in food and cotton imports.

6. India's membership of the sterling area had not prevented new lines of trade developing or new alignments in exports and imports taking place. For example, before the war India's trade with the United States and Canada was only 8 to 10 per cent of the total. Now it was about 20 per cent., excluding the exceptional levels of food imports in 1951-52.

While during the war, the balance of trade was favourable for India, it was almost always against India during the post-war period. Before the war, India sought a positive balance of trade in order to pay for the Home Charges. After the second World War, India is once again in need for a favourable balance of trade, as well as external finance to be in a position to pay for the essential imports such as machinery and plant, and food. In 1950-51, our adverse balance of trade declined very sharply. This was made possible by the increase in the exports of cotton manufactures, oils, tea, gums, resins, lac, raw wool, woollen manufactures, tobacco and fruits. Devaluation to a great extent was responsible for a sharp rise in our exports. The Korean war also was responsible for a spectacular increase in our exports.

Our external deficit in these years was largely with the non-sterling and specially with the dollar and other hard currency areas. In 1950, we had an unfavourable balance of trade with Pakistan to the tune of Rs. 2 crores. The next year, the deficit rose to Rs. 46.9 crores. From 1948, India is continuously having an unfavourable balance of trade with the U.S.A. It was Rs. 30 crores in 1948 and rose to Rs. 64 crores in 1951.

Analysing the composition of our trade during the post-war years, we find that the share of raw materials increased in the total imports of the country, while on the exports side, the share of raw materials decreased. This tendency was already visible during the war. This tendency has been accelerated by the partition. Our jute and cotton production has gone down. Thus, we can now export less of these goods, and have, on the contrary, to import them. We have also suffered on account of the partition in the matter of oilseeds, shellac, hides and skin, tobacco and spices. In 1951-52 the exports of raw materials from India formed only 20% of the total, as against 45% in 1938-39. Among imports, the share of raw materials has increased from 22.7% of the total in 1938-39 to 30% in 1951-52. Similarly, the imports of manufactured goods are steadily declining while the exports of manufactured articles are on the increase. Manufactured articles formed 40% our total imports in 1951-52, as against 61% in 1938-39. In the same period the proportion of exports of manufactured goods has almost doubled, In spite of being an agricultural country India has to import large quantities of food every year. Food, drinks, etc., form about 30% of our total imports. The food imports have been on the increase specially after 1948, in which year they were valued at Rs. 110 crores. This figure rose to Rs. 219 crores by 1951-52. Our main suppliers are Argentina, the U.S.A. Canada, Italy, Australia and Burma. Early this year (1954) the Government of India announced that the food crisis had passed and that India had become more or less self-sufficient in important cereals. But the floods have played havoc this year and extensive damage is caused to crops, cattle and property in Bengal, North Bihar, Assam and some other parts of the country. This might again worsen the food situation, necessitating large-scale food imports.

If we analyse the direction of foreign trade in the post-war years, we find that the share of the non-empire countries, and especially the U.S.A., Egypt, Iran, etc., is increasing. The U.K. still holds an important place in India's foreign trade but it may be expected that the U.S.A would soon catch up with her. The bilateral trade treaties signed by India have also resulted in the diversion of our foreign trade in non-empire channels. While among the commonwealth countries, Pakistan, Canada and Australia are still important, the non-empire countries of the Middle and Far East are gaining in importance.

## INDO-PAKISTAN TRADE

At the time of the partition of India, on the 15th August, 1947, it was decided that until 29th February 1948, the flow of trade between India and Pakistan should be free and that no customs barriers should be set up till then. This decision was embodied in the Standstill Agreement. Even as the Standstill Agreement was in force Pakistan chose to impose an export duty on raw jute exported to India. From the 1st March 1948, licensing and the tariff system came into existence between the two countries. This led to certain hardships for both sides and an Inter-State Agreement was signed at Karachi in May 1948. A fresh agreement was made on 24th June 1949. This was to last for one year. In August of the same year another agreement was entered into by the two countries. It related to the exchange of certain varieties of handloom cloth. Later when the pound sterling was devalued in September, 1949 the Indian rupee was kept at the same par as before with the pound sterling but depreciated vis-a-vis the U.S. dollar. As Pakistan had decided not to devalue her rupee, the commercial relations between the two countries were temporarily suspended. A short-term Agreement between the two countries was signed in April 1950 and expired in September 1950. The trade between the two countries was on a small scale following the expiry of the Agreement. Yet another Indo-Pakistan Trade Agreement was signed on 25th February 1951.

This Agreement was due to expire on 30th June 1952. It related the following commodities :

*Exports to Pakistan* : Coal, hard coke, soft coke, pig iron, ferro-silicon, ferro-manganese, galvanised sheets, black sheets, iron and steel products, M.G. Crossings, Mills loose jaws for M.G. steel sleepers in silico-manganese steel, Veys for M.G. steel sleepers, aluminium circles and sheets, high alumina fire brick, soft wood (jungle wood) hard timber other than teak, cement, stone and balast, paper, linseed oil, mustard oil, chlorine, rubber tyres and tubes of specified classes, handloom cotton cloth (*i.e.* loongis, towels, furnishing fabrics, etc.), mill made cotton cloth, cotton yarn, hard cotton-waste, jute manufactures, shellac.

*Imports from Pakistan* : Raw jute, raw cotton, cow-hides and sheep skins.

It was decided by the Governments under this Agreement to place certain listed commodities on the Open General Licence, for both imports and exports. India and Pakistan also agreed that the two Governments should grant each other export and import facilities not less favourable than those accorded to any other country in the sterling and the soft-currency area. The Government of India agreed that it would permit foreign exchange transactions between the two countries on the basis of the par value of the Pakistani rupee as declared by that Government.

This Agreement was extended in the first instance up to August 7, 1952. It was replaced by a fresh Agreement to last until June 30, 1953. In the meanwhile, India entered into a three-year Agreement with Pakistan on March 19, 1953. India agreed (i) to buy a minimum of 18 lakh bales of raw jute a year for three years and (ii) to discontinue the export surcharge of Rs. 11 per ton on coal exported to Pakistan. On the other hand, Pakistan agreed (i) to remove the licensing fee of Pakistan Rs. 2-8-0 per maund on raw jute exports to India and (ii) to lower the export duty on *kutcha* bales of raw jute to the same level as that on *pucca* bales.

From the figures of trade, we find that the importance of Pakistan in our foreign trade is fast declining. The exports of India have fallen from Rs. 7,501 lakhs in 1948-49 to Rs. 801 lakhs only in 1953-54. Similarly, on the imports side our imports of Pakistani goods have decreased from Rs. 10,929 lakhs in 1948-49 to Rs. 1930 lakhs in 1953-54. We have almost always an external deficit with Pakistan. Only in 1952-53 we had a net surplus.

## INDO-PAKISTAN TRADE

| *Items* | 1948-49 | 1949-50 | 1950-51 | 1951-52 | 1952-53 | 1953-54 |
|---|---|---|---|---|---|---|
| | *(in lakhs rupees)* | | | | | |
| **EXPORTS** | | | | | | |
| 1. Fruits and vegetables | 1,68 | 2,08 | 2,25 | 5,61 | 1,91 | 4 |
| 2. Spices | 2,49 | 1,57 | 90 | 4,12 | 67 | 11 |
| 3. Tobacco, unmanufactured | 97 | 1,63 | 1,98 | 2,27 | 77 | 4 |
| 4. Tobacco, manufactured | 5,03 | 3,75 | 3,51 | 4,73 | 1,57 | 3 |
| 5. Coal | 1,78 | 4,42 | 8 | 2,36 | 3,21 | 2,74 |
| 6. Mustard Oil | 3,27 | 3,52 | 1,91 | 2,60 | 1,89 | — |
| 7. Hides and skins, tanned | 1,37 | 89 | 47 | 32 | 30 | — |
| 8. Cotton Twist and Yarn | 1,27 | 1,54 | 67 | 38 | 28 | 19 |
| 9. Cotton Piecegoods | 21,98 | 2,63 | 5,98 | 3,70 | 4,64 | 47 |
| 10. Jute gunny bags & ,, ,, cloth | 5,51 | 2,40 | 3,19 | 4,38 | 3,07 | 4 |
| 11. Others | 29,66 | 17,00 | 9,49 | 14,79 | 12,79 | 4,32 |
| TOTAL: | 75,01 | 41,43 | 30,43 | 45,26 | 31,10 | 8,01 |
| **IMPORTS** | | | | | | |
| 1. Grain, Pulse and flour | 1,80 | 3,58 | 2,47 | 11,58 | 40 | — |
| 2. Fruits & vegetables | 2,91 | 1,84 | 1,26 | 1,10 | 88 | 60 |
| 3. Hides & skins, raw | 1,78 | 57 | 2,11 | 80 | 56 | 56 |
| 4. Oilseeds | 6,12 | 3,26 | 3,58 | 2,09 | 10 | 3 |
| 5. Raw Jute | 71,24 | 21,17 | 27,48 | 67,08 | 16,48 | 14,31 |
| 6. Raw Cotton | 16,54 | 6,99 | 27 | 7 | — | — |
| 7. Others | 8,90 | 6,63 | 6,70 | 4,78 | 3,48 | 3,77 |
| TOTAL: | 109,29 | 44,04 | 43,87 | 87,50 | 21,88 | 19,30 |

## TRADE AGREEMENTS OF INDIA

### THE OTTAWA AGREEMENT OF 1932

Under the stress of the Great Depression the British Government was compelled to strengthen her imperial economic ties with a view to ensuring the empire markets for the products of the empire and also to improve the industrial conditions of the United Kingdom. The Great Depression had already forced the U.K. to adopt a protective policy and by the Import Duties Act, 1932, a general *ad valorem* duty of 10% was imposed on all imports. The operation of this Act vis-a-vis Indian and Dominion imports was not made immediately effective, as the latter countries were expected to enter into an agreement with the U.K. ensuring the empire market for the empire products.

By the Ottawa Pact, Indian exports to the U.K. were to receive a preferential treatment. These exports were classified into four schedules.

Schedule A related to wheat, rice excluding broken rice, oils, magnesium chloride and linseed. These goods were made subject to specific rates of duty. Under Schedule B coffee was to have a marginal preference of 9 sh. 4 d. per cwt. Schedule C included tea, coir goods, cotton and jute manufactures, woollen carpets and rugs, undressed leather, oil-seed cake, paraffin wax, spices, teak and other hard woods, groundnuts, tobacco, etc. An assurance was given that these commodities would receive the highest margin of preference with the countries of the empire. Under Schedule D lac, raw jute, myrobalans, broken rice, mica and certain varieties of Indian hemp were to be allowed free of any import duty. Although the British Import Duties Act of 1932 applied to imports into the U.K. of barley, pulses, miscellaneous foodgrains, manure and bones, raw goat skins, asbestos, these commodities were guaranteed free entry if they came from India.

The import side of the Ottawa Agreement refers to the preferences shown and concessions given by India to imports from the U.K. Such items numbered nearly 163. India undertook to give a 7½% preference on motor vehicles and 10% preference to general imports from the U.K. Some of the articles for which we gave preference under the agreement were :—building and engineering material, chemicals, drugs and medicines, earthenware and porcelain, furniture and cabinetware, hardware, instruments, apparatus and appliances, leather goods, aluminium, copper, lead, German silver, zinc, brass and silver alloys and their manufactures, paint and painter's material, paper and stationery, rubber tyres. A 10% preference was also applicable to certain articles of food and drink and to certain oils. Another agreement was signed later between the U.K. and India and it related to galvanised sheet imports from the U.K.

After the signing of the Pact a public controversy arose regarding the wisdom of India's signing the Pact.

The advocates of the Pact welcomed it on the grounds that under the then existing conditions of world trade it was very wise on the part of India to have entered into the agreement. According to them the Pact gave Indian raw materials a preferential treatment in the great open markets of Great Britain. We would have lost the world's most stable and the largest open market, *viz.*,the U.K. by our failure to have joined the Pact. It was further argued that under the world conditions of unstable exchanges, the Sterling Bloc had solved the difficulties of foreign trade by this Agreement and by mutually ensuring of their markets to the products of the empire countries by means of preferential treatment. Despite unstable conditions in the world India was able to carry on her trade in the normal way due to the operation of the Ottawa Pact. Statistical evidence was adduced to prove that our exports to the U.K. rose suddenly after the Agreement. Although it is true that after the fall of our exports in 1932-33, they did rise the next year in respect of the U.K.

as compared with other countries. But this rate of increase was not kept up in 1934-35.

In general there was an adverse feeling about the Pact. It was argued by the antagonists of the Pact that it was detrimental to the prosperity of India. Such a Pact, the critics pointed out, could not bring together the countries of the Dominion, most of which discriminated against India in respect of immigration, etc. Others pointed out that a trade agreement on a reciprocity basis could not be concluded to mutual advantage when firstly, one of the parties to it was politically subservient to the other, and secondly, the fact that India was a predominantly agricultural country complicated the matters when she had to offer preferences to the imports of a highly industrialized country like the U.K. It was also argued that the preferences shown by the U.K. to the Indian products (which were raw materials and foodstuffs) were no favour done to India, as these preferences were inevitable even without a Pact. Further the concessions given to India were shared by other Dominions with the result that India had to face the powerful competition of the Dominions, in respect of pig-iron, lead, coffee, spices, tobacco, pulses, beans, and barley. Again, the countries, whose exports of manufactured goods were hit by the Indian preference shown to British products, retaliated by passing tariff measures against Indian imports. As a result there was a sharp fall in the prices of our exported goods. The British preference to Indian tea was of no avail as similar preference was also given to Ceylonese tea. Same was true of many other products. Thus Great Britain got food products cheaply without conceding anything substantial to the Indian products.

The Indian Delegation to Ottawa was highly satisfied with securing free entry into the U.K. for our shellac, raw jute, goat skins, jute manufactures, etc. But as India had a monopoly in these goods, there was no justification for the Delegation's self-congratulatory attitude. The British preference to Indian tea was in fact a preference accorded to the British interests in the Indian tea industry. Indian raw cotton, which in fact needed a stable market, was not shown any preference by the U.K. on the plea that Lancashire had not much use for Indian short staple cotton. It must be noted here that Indian cotton manufactures were to be given preference by the U.K. This was indeed very strange as Indian cotton goods could never sell in Lancashire. In short, the incidence of gain was highly particularised by the Ottawa Pact.

The critics of the Pact also argued that as an importer of manufactured goods, our country was greatly handicapped by the Ottawa Agreement. India could not buy goods from other countries even if that was to her interests in certain cases. The existence of this Agreement precluded India from concluding bilateral trade pacts with other countries. As preference was shown to British manufactured goods, India could not encourage her own indigenous and promising small-scale industries, which under an appropriate stimulus could have been able to supply the home needs. It was pointed out that a preference to British goods could be shown either by reduction of tariffs or increasing the tariffs on the imports from countries other than the U.K. The latter course was adopted by India because a reduction of tariffs would remove the protection given to Indian industries. The result of this choice was the increasing of the burden of the Indian consumer. It was further argued that as prices would increase the customs revenue would be appreciably reduced by the reduction of imports and the balance of trade position would be upset.

The Agreement neither satisfied the public opinion in India nor benefited the commercial interests. It estranged our trade relations with other countries of the world which retaliated by taking measures against India. Our exports did not increase. The Agreement only diverted their direction in favour of the U.K. and the empire countries without any net advantage to India. The consumers had to pay higher prices for foreign goods and the customs revenue was adversely affected. The Pact destroyed effectively our capacity for fiscal freedom. The Pact drove India to a greater dependence on the U.K., at the same time producing a crippling effect on the home industries.

On 30th March 1936, the Agreement completed the third year of its operation. The Central Legislative Assembly recommended its termination without delay. The Government of India, on May 13, 1936 gave a six months' notice of the termination of the Agreement which came to an end on the 13th Nov. 1936. However, the Government of India decided on 20th October 1936 to continue the preferences to Great Britain till a fresh agreement was arrived at. But this arrangement could be terminated by a three months' notice on either side.

### THE BOMBAY-LANCASHIRE TEXTILE AGREEMENT

This agreement was also known as the Mody-Lees Pact. Mr. H.P. Mody, the then President of the Bombay Mill Owners' Association represented India and Sir W. Clare Lees, as the leader of the British Textile Mission to India, represented England. This Pact was signed at the end of 1933 and was to be in force till December 1935. It was based on what is known as the principle of preference within protection. It gave substantial differential advantages to the U.K. It arranged to extend to the Indian goods many advantages served for the British goods in the empire and other overseas markets.

The provisions of the Pact were as follows :

1. It was agreed that the Indian Cotton Textile Industry is entitled, for its progressive development, to a reasonable measure of protection against the imports of United Kingdom yarns and piecegoods. It was also agreed that under present conditions, owing to lower costs and other factors operating

in foreign countries, the industry required a higher level of protection against them than against the U.K.

2. As regards cottonpiece goods, it was agreed that if and when the revenue position of the country made it possible for the Government of India to remove the general surcharge on all imports imposed in October 1931, the Indian side would not make any fresh proposals with regard to the duties applicable to the U.K. imports.

3. In the matter of cotton yarns the Indian side agreed that, so far as imports from the U.K. are concerned, the duty may be 5% *ad valorem* with a minimum specific duty of 1¼ annas per lb.

4. So far as artificial piecegoods are concerned, the Indian side agreed that in the case of the U.K., the duties may be as follows :—

30% *ad valorem* of 2 annas per square yard for mixture fabrics of cotton and artificial silk.

5. In so far as the empire and other overseas markets for piecegoods and yarns are concerned, it is agreed that any advantages which might be arranged for British goods should be extended to Indian goods and that India, in markets in which she has no independent quota, should participate in any quota which might be allocated to the United Kingdom.

6. The British Textile Mission gave an undertaking that it would take effective steps for promoting the use of Indian cotton in Lancashire mills and make a periodical report of their work to popularise Indian cotton.

The Agreement came under severe criticism in India. It was argued that it gave definite concessions to Lancashire but India got nothing more than vague promises in return. The Pact did not provide for a definite off-take of Indian cotton and Indian textiles. There was a mere promise to popularise Indian cotton in Lancashire. It must be noted that such a promise had little meaning as Lancashire could not make increased use of Indian cotton because its machinery was suited to the use of American long staple cotton. On the part of India, however, definite tariff concessions were made to British yarns and artificial silk. The Agreement paid no regard to the principle of *quid pro quo*.

At the time when the Mody-Lees Pact was signed, some wishful thinkers in India hoped that this Pact would produce a favourable reaction for the granting of political independence to our country by the British. History proved that such a placating of British commercial interests did not have any effect whatsoever on the question of granting Swaraj to India.

The Agreement was also criticised on the grounds that the parties to it did not fully represent the Indian textile industry as a whole. The Bombay Millowners' Association represented only 50% of the total number of looms and spindles in the country. It was argued that what was good for half of the textile industry was not necessarily in the best interests of the other half. On this contention, therefore, Bengal, and other parts of the country questioned the right of Bombay to represent the whole of the Indian textile industry.

Under conditions of the depression, with very low levels of the purchasing power of the masses, it was argued, that this Pact, between the capitalists of the U.K. and India, jeopardised the interests of the Indian consumers. These critics wanted, therefore, the Government of India to intervene and protect the consumers' interests.

It was hoped that this Pact would ensure the co-operation of the U.K. to drive out Japan from the Indian textile market. But it was not realised that small concessions to the U.K. would not be strong enough to hit Japanese competition and besides Japan was our best customer for raw cotton. It was always desirable to have friendly relations with our customers. The Pact did not consider the need for ensuring the prosperity of the Indian cotton trade. Non-empire countries like Japan resented this Pact and the restriction of India's trade to imperial channels.

Thus in spite of the legislative sanction given to the Pact by the Government of India, there was a severe opposition to the same from various quarters in the country.

## THE SUPPLEMENTARY INDO-BRITISH TRADE AGREEMENT

As a sequel to the notice for the termination of the Ottawa Agreement, mentioned earlier, attempts were made to secure another agreement. The Government of India brought an official resolution in the Assembly for this Supplementary Indo-British Trade Agreement. This resolution was thrown out by the Assembly but the Viceroy certified it under his special powers and it was in force till 1939.

This Agreement provided as follows :

1. The Indian industry had a right of protection against the British industry also, but the protection should be lower than against other countries.

2. The amount of protection given to any Indian industry should not be greater than what was just enough to make the selling prices of goods made in India equal to the prices of imported goods and wherever possible, lower duties should be imposed on British goods.

3. India should apply only the principle of discriminating protection, in the matter of granting protection to industries.

4. When a substantive protection was to be granted to any Indian industry, the British interests should be given an opportunity to put their case before the Indian Tariff Board.

5. The Government of India should review the situation even during the course of protection on a request by the British Government and should revise the same if necessary.

6. The British Government promised to popularise Indian cotton in English mills and to continue to import

pig iron free of duty but only so long as the preferences to British steel imported in India continued at the same rate.

That the Indian opinion was against this Agreement would be clear from the very fact that the resolution proposing the same was defeated in the Assembly. The Indian commercial interests were not consulted before this Agreement was reached. This Agreement undermined the fiscal autonomy of India and made a farce of the principle of discriminating protection. The principle of preference within protection which was accepted under duress could not be made the basis of a permanent commercial policy. The antagonists of the Agreement maintained that the Indian promises made under the Ottawa and Bombay Lancashire Pacts were perpetuated by this Agreement, in spite of severe opposition from Indian public opinion. In short, the Agreement favoured Great Britain more than India.

### THE NEW INDO-BRITISH TRADE AGREEMENT (1939)

After prolonged negotiations between His Majesty's Government of the United Kingdom and the Government of India, a new Indo-British Trade Agreement was signed on the 20th March 1939, replacing the Ottawa Agreement, as well as the Supplementary Agreement. The Assembly once again defeated the official resolution proposing this Agreement, as also the Indian Tariff Bill, 1934 by a heavy majority. The Viceroy once again certified the same and the Agreement came into existence to last till 31st March 1942, subject to a 3 months' notice on either side for a premature termination.

This Agreement made the following concessions to India.

India's exports of lac, raw jute, myrobalans, mica and hemp were to continue to enjoy free entry into the British market.

Bones, castor seed, coir yarn, cotton yarn, goatskins (both raw and dry) gram, groundnut, hides and skins undressed, linseed, magnetite, oilseed (cake and meal), paraffin wax, sandalwood oil, soya beans and spices etc. were to receive preferences at the rate of 10% *ad valorem* over foreign imports into the United Kingdom market.

The Pact secured for India a 15% preference for castor oil, linseed oil, coconut oil, groundnut oil, rape oil, sesamum oil, undressed leather and jute manufactures.

The U.K. granted a 20% preference to our coir mats, cotton manufactures, blankets, shawls, sacks and bags.

Preferences at specific rates were offered on magnesium chloride at 1 shilling per cwt., on coffee at 9 sh. 4 d. per cwt., on tea at 2d. per lb., on rice husked and in the husk at 2 sh. 3d. per lbs., on hand-made carpets and rugs at 4 sh. 6 d. per square yard, and on other kinds of carpets and rugs at 20% *ad valorem.*

The preference already given to Indian tobacco was continued. But if the U.K. reduced the import duty on foreign tobaco below 2 sh. ½ d. the margin of preference should be equivalent to the full duty.

British textile imports into India were to receive the benefit of the lowered customs duty on condition that the U.K. took not less than 450,000 bales of Indian cotton.

The Agreement abolished the British system of granting drawbacks with regard to Indian groundnuts and modified the same regarding linseed, so that the real value of the preference enjoyed by Indian groundnut and linseed might be increased.

In the matter of concessions given to the United Kingdom, the following guiding principles were laid down :—

(i) The Agreement should not jeopardise India's domestic interests;

(ii) the preferences granted to the U.K. should be consistent with the Indian tariff policy;

(iii) the Agreement should not injure India's trade relations with foreign countries, and

(iv) the revenue of the Government of India should be properly safeguarded.

It was felt that since India was under no restriction to keep the import duties at their existing levels, the concessions granted to the U.K. could not be operating against the revenue of India.

According to the terms of the Pact India had to guarantee a minimum market for British piece-goods in India and to that extent sacrifice the growth of the textile industry. As against this, the U.K. promised to take up certain quantities of our raw cotton. Thus, on the balance, the U.K. got more benefits than India. India also agreed to reduce import duties to 17½% *ad valorem* on printed goods, 15% on grey goods, and 15% on other goods. In 1936 the prevailing import duty on British goods was 25%. It was then reduced to 20%. This Agreement put it at 15%. If this lowering did not help the U.K. in capturing the guaranteed portion of the Indian market, a further reduction of 2½% was promised. The effect of these concessions, in fact, was to nullify the protection granted to the Indian cotton industry.

In the non-textile groups, India granted a 7½% preference to motor cars and accessories, motor cycles, chassis of omnibuses, motor vans and lorries. A 10% preference was given to certain classes of chemicals, drugs and medicines, cement, paints, colours, woollen carpets and rugs, shawls, iron and steel, barbed wire, copper manufactures, refrigerators, sewing machines, electric appliances, wireless reception instruments, cycles, scientific and surgical instruments, loudspeakers, amplifiers. A preference of Rs. 3 to Rs. 4 per gallon was allowed on drugs and medicines containing spirit.

In spite of the fact that preferences in respect of hardware, aluminium, brass, bronze, zinc and other non-ferrous metals, electrical appliances, etc., were withdrawn, the preferences were nevertheless such as would jeopardise Indian aspirations of industrial progress.

The only thing that can be said in favour of the Agreement is that it was a slight improvement over the previous pacts from the point of view of India. Even the non-official advisers had recommended protection to Indian shipping and banking against British discrimination. The commercial community was against the Pact as these recommendations were turned down. While the concessions by India helped British industries, they prevented the growth of Indian industries. This Agreement also left no scope for any bilateral trade pacts between India and other countries because India could not offer any inducement to them. The British Government did not subsequently withdraw the drawback facilities on Indian linseed. Similarly, the British Government withdrew the protection granted to Indian wheat, reduced the preference on rice, chrome-leather, certain jute manufactures and woollen carpets. These things caused resentment in the Indian minds. The cotton article of the Agreement was subject to the severest criticism and there was a consensus of opinion that the bargain was immensely unfavourable from India's point of view. The free entry of pig iron in the U.K. was subject to difficult conditions. Any casual perusal of the Pact would show that the Indian raw materials allowed free entry in the U.K. were mostly India's monopoly. On the other hand, the preferences to the British goods were substantial and real. The preferences shown to the Indian goods were not enough and therefore of little value as the Indian goods had to face in the British market severe competition from other empire countries.

## THE INDO-JAPANESE TRADE AGREEMENT, (1934)

Under the Indo-Japanese Trade Convention of 1904, the most favoured nation clause was made applicable to Japan. Preference was shown to Japan, who had agreed to purchase Indian raw cotton. Since then Japan was the best customer of Indian raw cotton. At the end of 1931 Japan began to indulge in depreciation of the yen, which resulted in the virtual dumping of Japanese piece-goods in the Indian market. Although Japan was hit by the depression she was quick in her recovery. The boycott of British goods in India at this time gave an opportunity in the Indian market to the Japanese piece-goods, which were facing a similar boycott against them in China. So long as the Indo-Japanese Trade Convention existed, the Government of India could do nothing to protect the Indian textile industry, which had now started agitating. After a six months' notice of terminating the Convention, the Indian Government announced an increase in the duty on foreign cotton piece-goods to 75 per cent *ad valorem* wth a minimum specific duty of 6¾ annas per pound on plain greys. As a sequel to this the Japanese Cotton Association decided to boycott Indian cotton.

Subsequently, in October 1933, a Japanese Delegation came to India for talks. Finally, the Indo-Japanese Trade Agreement (1934) was signed in London, on 12th July 1934.

The Agreement consisted of two parts, *viz*, a Convention and a Protocol.

The Convention provided for the most favoured nation clause in trading relation with each other. It was agreed that if the yen depreciated after 31st Dec. 1933, the Government of India might impose increased tariff rates. It further provided that, if a modification of customs duties by one country adversely affected the other country, the modifying country should be ready to negotiate with the other country if it desired it.

The Protocol provided that the Indian import duties on Japanese cotton goods should not exceed, 50 per cent *ad valorem* (or 5¼ per cent per lb. whichever was higher) on plain greys and 50 per cent *ad valorem* on others.

The Protocol also provided that the basic quota of cotton piece-goods which might be exported to India in any piece-goods year (1st April to 31st March) should be 325 million yards on condition that Japan buys one million bales of raw cotton from India in any cotton year (1st January to 31st December). If the raw cotton bought by Japan exceeded one million bales, the quota of piece-goods might be increased by 1½ million yards for every 10,000 bales, and in no case should the piece-goods quota exceed 400 million yards. The same article of the Protocol, also provided that if the raw cotton bought by Japan fell below one million bales, the cotton piece-goods quota might be diminished by two million yards for every 10,000 bales of the shortage.

Imports into India were to consist of 45 per cent plain greys, 13 per cent bordered greys, 8 per cent. bleached goods and 34 per cent coloured (printed, dyed or woven) goods. The transfer of the amount under bordered grey or bleached goods should not exceed 20 per cent of the amount of such category and the amount transferred from any one category to any other shall not exceed 10 per cent of the amount of the category concerned. In no case could the total quota be increased.

From 1st January 1934, the Japanese boycott of Indian raw cotton was lifted. The Government of India reduced the import duties on Japanese goods from 75 per cent to 50 per cent from 1st January 1934. The Protocol part of the Agreement was to come to an end by 31st March 1937. The Convention could be terminated by either party giving a six months' notice to the other.

The Agreement was received favourably in India, as it was beneficial not only to the Japanese manufacturers but also to the Indian cotton grower. It also removed any ill feeling between the two countries. Subsequently exports of Indian raw cotton to Japan increased. However, it is difficult to judge whether this increase was due to the Agreement or the general trade revival in the world and also to the desire of the Japanese textile interests to obtain their raw material supplies cheaply. In due course, however, it was found that Japan had been taking advantage of certain loopholes in the

Agreement, with the result that our balance of trade with Japan became unfavourable. Japan not only exported in huge quantities cut-pieces and ready-made clothes not included in her quota, but also dumped in the Indian market cloth of unusual width. Obviously, she took advantage of the fact that while fixing her yardage of cloth to be sent to India, the width of the cloth was not specified. The result was that India imported large quantities of Japanese cloth than stipulated for. Taking advantage of the most favoured-nation clause, Japan sent to India such goods as crockery, cycle, umbrellas, toys, etc. At what low prices these goods were sold would be realised if it is noted that a Japanese bicycle cost in India Rs. 22 only, while a Japanese umbrella could be had for only 15 annas. Obviously, such a state of things was calculated to harm the interests of Indian industry. It was, therefore, suggested by the Indian industrial interests that a comprehensive agreement, rather than one confined to a single commodity, be signed with Japan.

## THE NEW INDO-JAPANESE TRADE AGREEMENT (1937)

As the Agreement was due to expire on 31st March, 1937, fresh negotiations for a new agreement were started in July 1936. After negotiations lasting for about 9 months a new Agreement was signed. Attempts were made to remove the defects of the 1934 Agreement, though the new Agreement was substantially the same. The new Agreement incorporated the Convention of the existing Agreement and Japan was assured of the most-favoured-nation treatment.

The Protocol of the Agreement was similar to the Protocol in the old Agreement but this time the quota of Japan was reduced in view of the shrinkage in the Indian markets, consequent on the separation of Burma from India. The yearly basic quota of Japanese piece-goods imported into India was reduced from 325 million yards to

283 million yards. The maximum limit for the import of cotton piece-goods from Japan was fixed at 358 million yards provided Japan's off-take of Indian cotton was 1½ million bales.

Among different kinds of piece-goods the quota was distributed as follows :—

(i) plain greys, 40% of the total imports,
(ii) bordered greys, 13%;
(iii) bleached (white) goods, 10%;
(iv) coloured printed goods, 20% and
(v) coloured, dyed or woven goods, 17%.

The total imports of the cotton fents were limited to 8,950,000 yards annually and the customs duties on fents were 35% *ad valorem*.

The Agreement came into force on 1st April 1937 and was to remain in force till 31st March 1940. The retention of the Convention was a definite gain for Japan. Solicitous of the position of the Indian cotton grower, whom they wished to protect, the Government of India did not use its bargaining position to the fullest advantage. If they had bargained hard, they could have avoided the adverse effects of Japanese competition on our small-scale and cottage industries. The reduction of the Japanese quota on account of the separation of Burma was small. Prior to the separation Burma's off-take of Japanese piece-goods was of the order of 70 million yards per year, whereas, under the Agreement the Japanese quota was reduced by only 42 million yards.

Though cotton fents were not included in Japan's quota for piece-goods and attempt was made to fix their total imports. The imports of silk fents and artificial silk piece-goods were outside the operation of the Agreement. This exclusion was severely criticised in India and therefore, the Government later on prohibited the imports of artificial silk fents and raised the duty on imports of artificial silk piece-goods by one anna for every square yard. This Agreement permitted the Japanese exports to India of ready-made clothes, twills and cotton blankets. Japan made up for the loss of her quota by sending these goods.

This Agreement was not terminated in March 1940, when it was due for expiry. But it continued in force till July 1941, when it came to an end by Japan's entry in the war, as an axis country.

## THE INDO-BURMA TRADE AGREEMENT (1941)

Burma was separated from India on 1st April 1937. An Order-in-Council governed the trade relations between the two countries since that time. This Order came to an end on 1st April 1941 when the need for a trade agreement was felt.

By this Agreement the two countries were to give each other reciprocal concessions. In matters of tariffs the two countries were to give each other 10% preference against goods from other empire countries and 15% against goods of foreign countries. The Agreement conceded most favoured nation treatment to each other. No termination date was fixed by the Agreement, but it could be brought to an end by a six months' notice on either side.

The Government of Burma allowed free entry into Burma to 77 articles. Certain Indian goods would be taxed below 5% and certain other goods below 10% for entry into Burma. Special duties were to be charged, with maximum limits set by the Agreement, on certain Indian goods. India was to allow Burmese rice and broken rice free entry into India. Reciprocal concessions were given by India to other Burmese goods. During the war, Burma was not to levy export duties on timber exported to India. With the occupation of Burma by Japan, Indo-Burmese trade relations were severed.

After independence both the countries entered into an Agreement on 29th Sept. 1951. India is to take the Burmese exports of rice, lead, teakwood, tin, wolfram, hides and skins, etc. Burma has agreed to take up jute bags, groundnut oil, cotton yarn, galvanised iron sheets, leather manufactures, tea, spices, tobacco, fruits and vegetables, fish, etc.

Apart from this long term Agreement very recently, *i.e.*, in the summer of 1954 a rice deal has been entered into between the two countries.

## RECENT TRADE AGREEMENTS

India has in recent years entered into several trade agreements and barter deals. Many of these were concluded in 1949-50, some of which were renewed and extended. These agreements were mainly based on the principles of securing essential goods from the soft currency countries and to promote the export of Indian goods.

We give below merely the names of the countries with which trade treaties have been signed by India and the exports and imports stipulated in the respective agreements.

AUSTRALIA. (Signed on 1-10-1951).

*Imports into India* : Wheat, lead, zinc, tallow, stearine and casein.

*Exports from India* : Jute manufactures, vegetable oils, cotton piece-goods, short staple cotton, cotton waste, cotton yarn.

BURMA. (Signed on 29-9-1951).

*Imports into India*: Rice, lead, teakwood, tin, wolfram, hides and skins.

*Exports from India* : Jute bags, groundnut oil, cotton yarn, galvanised iron sheets, leather manufactures, tea, spices, tobacco, fruits and vegetables, fish, etc.

CEYLON. (Signed on Feb. 14, 1952) .

*Imports into India* : Copra, coconut oil, hides and skins (raw and salted), unmanufactured tobacco, betelnuts, cloves, citronella oil.

*Exports from India* : Coal, cotton yarn, jute goods, cotton waste, aluminium ware, castor oil, tobacco.

EGYPT. (Signed on June 28, 1952) .

*Imports into India* : Raw cotton, cotton yarns (counts 80's and above) rock phosphates, gypsum anhydrate.

*Exports from India* : Tea, vegetable oils, cotton piece-goods, shellac, iron and steel manufactures.

AFGHANISTAN. The treaty of Trade and Commerce signed on 4th April, 1950, provides for most-favoured-nation treatment to each other and their nationals in matters relating commerce, industry and trade.

WESTERN GERMANY. (a previous agreement extended on 1st November 1951).

*Imports into India* : Chemicals and allied products, machinery and metal products, non-ferrous metals, instruments and apparatus, iron and steel, etc.

*Exports from India* : Chemicals, coir yarn, raw and manufactured jute, raw wool, manganese ore, mica, hides and skins, coffee, groundnuts, tea, tobacco.

NORWAY. (1951).

*Imports into India* : Chemical fertilisers, cod liver oil calcium carbide, staple fibre, ferro-silicon, testing machines, textile machinery, electric motors, diesel engines, pump sets, machine tools and newsprint.

*Exports from India* : Jute goods, cotton textiles including powerloom cloth, raw wool and woollen manufactures, leather and leather goods, cashew nuts, spices, tea, tobacco, shellac, mica, manganese ore, vegetable oils.

SWITZERLAND. (8th June 1951).

*Imports into India* : Equipment for the machine tool factory, railway coaches, dyestuffs, textile chemicals, textiles.

*Exports from India* : Groundnuts and groundnut oil, linseed, hessian, coffee, manganese ore, tea, spices.

POLAND. (27th March 1952).

*Imports into India* : Raw zinc, zinc dust, zinc sheets, water meters, steel bottles, optical glasses and instruments, textile machinery, machine tools.

*Exports from India* : Iron ore, manganese ore, shellac, myrobalan and myrobalan extracts, mica, cane, tea, pepper, tobacco, chemicals.

## TRADE AGREEMENTS OF 1952-53 AND 1953-54

ITALY. (7-4-1952, agreement for 1952)

*Imports into India* : Chemicals and chemical products, paper, raw silk, moulding powders, electric transformers, generators and motors, machine tools.

*Exports from India* : Oils, oil-seeds, spices, tea, coffee, manganese ore, mica, coal.

SWEDEN. (5-5-1952, agreement for 1952).

*Imports into India* : Newsprint, aluminium covered steel cables.

*Exports from India* : Kyanite ore, manganese ore, jute goods, castor oil, cotton waste.

SWEDEN. (30-6-1953, duration from 1-1-1953 to 31-12-1954)

*Imports into India* : Newsprint, paper and its products, staple fibre, machinery and millwork, hardware, metals and ores, wood pulp, chemical and chemical preparations.

*Exports from India* : Spices, jute manufactures, coir manufactures, lac, mica, tobacco, vegetable oils, hides and skins.

EGYPT. (28-6-1952 agreement for the period 1-3-1952 to 28-2-1953).

*Imports into India* : Raw cotton, cotton yarns of count 80's and above, rock phosphates, gypsum anyhydrite.

*Exports from India* : Tea, vegetable oils, cotton piecegoods, shellac, iron and steel manufactures.

EGYPT. (8-7-1953, to remain in force till it is modified or terminated by either party giving 3 months' notice.)

*Imports into India* : Raw cotton, cotton yarn, gypsum, rock phosphates, flax, dry dates, raw goat skins, essential oils, perfumes and essence of geranium.

*Exports from India* : Unmanufactured tobacco, jute, goods, coal, oils and oilseeds, cotton piecegoods iron and steel manufactures, certain types of machinery, Indian handicrafts.

PAKISTAN. (Previous agreement extended up to 7-8-1952).

*Imports into India* : raw jute, raw cotton, hides and skins, rice, wheat.

*Exports from India* : coal, iron and steel products, hard timber, jute manufactures, cotton textiles, mustard sil.

(New agreement signed on 5-8-52 and effective up to 30-6-1953).

*Imports into India* : Hides and skins, fish, bamboo, spices.

*Exports from India* : Certain categories of iron and steel and machinery, railway materials, wood and timber, beedies, beedi leaves, tobacco.

This agreement was extended up to 30-9-53.

A separate agreement was signed on 19-3-1953 to last for 3 years beginning from 1-7-1953. This related to our imports of raw jute and our exports of coal.

AUSTRIA. (19-7-1952. Period of duration 1-7-1952 to 30-6-1954).

*Imports into India* : Building and engineering materials, woollen piecegoods, cotton thread, hand knitting wool, newsprint, aluminium circles, sheets, plates, wires and tubes, tungsten and molybdenum products, machine tools.

*Exports from India* : Tea, tobacco, handloom products, coir and coir products, spices, cotton and cotton waste, vegetable oils, iron ore, manganese ore, hides and skins tanned, shellac, raw wool.

AUSTRIA. (30-11-1953. Validity of schedules A & B of the 1952 agreement previously extended up to 30-11-1953 extended further to 30-6-1954).

*Imports into India* : Revised schedule includes rubber threads (admissible types), chemicals like bichromates, chromic acid and magnesium chloride, admissible types of textile machines.

*Exports from India* : Coffee, groundnut oil, carpets and rugs, coir and coir products.

FINLAND. (2-9-1952, duration extended up to 1-1-1954).

*Imports into India* : Newsprint, woodpulp board, folding box board, container board, paper and paper products (of certain permissible types), steel files, farming machinery, cables.

*Export from India.* Tobacco, cashewnuts, spices, jute goods, tea, coffee, shellac, sugar, vegetable oils, chemical products, cotton waste, textile and hosiery goods (including woollen goods).

NORWAY. (13-9-1952. duration extended up to 1-1-1954, certain schedules being effective only for 1952).

*Imports into India* : Newsprint, mechanical and chemical pulp, welding equipments, machine tools, certain types of machinery, iron and steel soil pipes.

*Exports from India* : Jute goods, tobacco, spices, oils and oilseeds, cottage industry products, iron ore, coir and coir products, cotton waste, manganese ore, drugs and medicines, rubber goods.

NORWAY. (26-6-1953, revision of schedules A & B of the previous agreement for the year 1953).

*Imports into India* : Fish (frozen and canned), planed wood and box board, mechanical and chemical pulp, newsprint and paper of all sorts (permissible types), staple fibre, motor locomotives up to 15 tons, certain types of mchinery, art silk yarn and thread.

*Exports from India* : Cotton textiles, silk and rayon fabrics, jute goods, wool and woollen manufactures, coir, hides and skins, oils, spices, tea, tobacco, shellac, cottage industry products.

On February 20, 1954, this agreement was extended up to 1-1-1955.

WESTERN GERMANY. (5-11-1952, duration from 1-11-1952 to 31-10-1953).

*Imports into India* : Chemicals and related products, machinery, metal products.

*Exports from India* : Tobacco, cotton, ores, coffee, tea, raw wool, mica, seeds, shellac, essential oils, cotton piecegoods (grey), jute manufactures, woollen carpets.

WESTERN GERMANY. An agreement was signed on 11-11-1953 by which the current agreement was extended up to 31-1-1954. A new agreement was signed on 16-2-1954 for the period 1-2-1954 to 31-1-1955. This relates to the exports from India of wild animals, bristles, crushed bones, raw coffee, pepper and other spices, tea (except in packings), vegetable oils, shellac, mica, manganese ore, cotton raw and waste, hides and skins.

HUNGARY. (22-11-1953, duration extended up to 1-1-1954).

*Imports into India* : Machine tools, agricultural machines, X-ray and electro-medical apparatus, locomotive engines, carriages and parts for railways, optical articles.

*Exports from India* : Tea, tobacco, shellac, spices, vegetable oils, jute goods, cotton waste, cotton yarns and thread, chemicals and drugs, cottage industry products.

INDONESIA. (30-1-1953, duration 1-1-1953 to 31-12-1953)

*Imports into India* : Copra, coconut oil, palm oil, spices, betelnuts, timber, tin, rubber.

*Exports from India* : Jute goods, tobacco, handloom products, cotton and woollen piecegoods, cement, soap and chemicals.

## BARTER AGREEMENTS

(1) PAKISTAN. (24-6-1952).

*Imports into India* : 37,700 tons of Sind rice.
*Exports from India* : 39,700 tons of U.S. Wheat.

(2) ARGENTINA. (22-10-1952).

India to import wheat equivalent to the value of 40,000 tons of jute goods.

## TREATY OF FRIENDSHIP AND COMMERCE

(1) SYRIA. (came in force from 5-12-1952 and to last for 3 years).

This treaty provides for the strengthening of the existing ties of friendship, culture and commerce and stipulates mutual assistance in each other's industrial and agricultural progress. The commercial article provides for the maintenance and development of mutually advantageous commercial and trade relations and assistance in furthering trade in respect of certain exportable commodities. These goods include in the case of India, cotton piecegoods, rubber tyres and tubes, soap, steel manufactures; and sulphur, raw cotton, copper, and coarse grain from Syria.

## TRADE AGREEMENTS (Contd.)

IRAQ: (6-5-1953, duration up to 31-12-1954 in the first instance).

*Imports into India* : Live animals, long staple cotton, dates, foodgrains, hides and skins.

*Exports from India* : Spices, tea, vegetable oils, wood and timber, cotton, jute and woollen goods, raw wool. raw cotton.

POLAND. (1-6-53, duration from 1-1-1953 to 31-12-1954).

*Imports into India* : Water meters, optical glasses and instruments, textile machineries and parts, wood working machineries and parts, electric meters, transformers, sheet and plate glass, dyes, chemicals, newsprint, woollen fabrics.

*Exports from India* : Manganese ore, iron ore, mica, tea, shellac, tea, spices, tobacco, cashewnuts, hides and skins, sports goods, raw cotton, raw coffee, waste wool, handicrafts and cottage industry products.

Another agreement was signed on 30-3-1954 for the year 1954.

*Imports into India* : Plants for sugar, cement and concrete factories, refrigerating plants, chemicals, coal tar dyes, agricultural machinery, Polish films, cottage industry products and handicrafts.

*Exports from India* : Iron ore, manganese ore, mica, shellac, tea, spices, tobacco, cashewnuts, hides and skins, sports goods, raw cotton, raw coffee, waste wool, handicrafts and cottage industry products.

TURKEY. (4-6-1953 for one year to be extended by mutual agreement.)

*Imports into India* : Dried fruits, coarse grains, pulses, raw cotton, quicksilver, silk yarn and cocoons, wax, olive oil in bottles, cheese.

*Exports from India* : Tea, jute goods, Henna leaves, coir yarn, motor tyres and tubes, spices, cotton piece-goods.

BULGARIA. (17-6-1953, duration 1-6-1953 to 31-12-1954)

*Imports into India* : Fruits, tiles, electrometres, H.P. Motors, D.C. and others over 50 H.P., thrashing machines, milling machines, planing machines and concrete mixers.

*Exports from India* : Spices, lac, essential oils, castor oil, raw wool, raw cotton, coir yarn, drugs and medicines, electric wire and cables electric lamps.

BURMA. The current trade agreement between Burma and India was modified on 3rd July 1953.

CEYLON. (15-7-1953, duration from 1-9-1953 to 31-8-1957).

*Imports into India* : Imports of Jaffna tobacco would be permitted through Allepy, at special rates of import duty.

*Exports from India* : Larger imports of Indian grown tobacco into Ceylon would be facilitated, beedies from India would be allowed under O.G.L. into Ceylon. Import duty on Indian handloom towels and towellings to be reduced to the lowest rate applicable to mill-made towels and towellings.

YUGOSLAVIA. (24-7-1953, duration one year after ratification.)

*Imports into India* : Dried fruits and vegetables, tea chests, dyes and colours, certain types of metals and metal manufactures and machinery.

*Exports from India* : Cotton yarn and textiles, cotton raw and waste, wool and woollen manufactures, mica, tea, manganese ore, shellac, cottage industry and handicraft products.

CZECHOSLOVAKIA. (17-11-1953, to last till 31-12-1954, and may be extended by mutual agreement).

*Imports into India* : Certain types of machinery, sheet glass, certain types of dyes and colours, agricultural tractors and parts, leather and rubber belting, sewing machines, refrigerators.

*Exports from India* : Coffee, groundnut oil, carpets and rugs, coir and coir products.

U.S.S.R. (2-12-1953, duration five years.)

*Imports into India* : Foodgrains (wheat and barley), crude petroleum and petroleum products, iron and steel manufactures, chemicals, dyestuffs, tractors and agricultural machinery.

*Exports from India* : Jute manufactures, tea, spices, hides and skins, wool, coffee, shellac, tobacco, vegetable and essential oils.

RUMANIA. (23-3-1954, valid up to 31-12-1954).

*Imports into India* : Foodgrains (wheat and rye), petroleum products, chemicals, dyestuffs, boring and mining equipment, certain types of machinery.

*Exports from India* : Jute manufactures, coffee, tea, spices, cottage industry products, handicrafts, hides and skins, wool.

## FOREIGN TRADE AND COMMERCIAL POLICY[1] IN THE FIRST FIVE YEAR PLAN[2]

In the last decade or so there have been a number of changes in the volume, composition and direction of India's foreign trade. Among these may be mentioned, in particular, a marked contraction in the volume of exports and a growing lack of diversification compared to the pre-war pattern, increased dependence on imports of food and raw materials, greater imbalance in the trade with the dollar area, and heavy demands for imports of machinery for replacement and development. In the initial stages of planning, these developments are likely to restrict to some extent the scope for making any radical changes in policy. The Plan itself is, however, designed to meet some of the problems that have arisen in recent years. Thus, the higher agricultural production for which it provides, will reduce the dependence on imports of foodgrains and of cotton and jute, and the greater availability of raw cotton and jute will increase the exportable surpluses of cotton and jute manufactures. It is also expected that export trade will develop in new lines of manufactures in this country, *e.g.*, sewing machines, batteries, bicycles, textile machinery, electric fans, pharmaceuticals, etc. Such articles are already being exported in small quantities to countries in South East Asia and this trend should become more marked with the expansion of these industries as envisaged in the Plan. The recovery of Germany and Japan and the development of greater trade relations with countries like Czechoslovakia and Sweden which can export capital goods, will also help to diversify trade and correct the existing imbalance with the hard currency countries.

---

[1] For India's Tariff Policy, see page 346 et seq. of M. E. D. Vol. I

[2] Reproduced from the First Five Year Plan—a Summary. Govt. of India. Planning Commission.

On the other hand, a large programme of development necessarily leads to increased demand for imports and a shortage of foreign exchange. The programme of development in this period entails heavy imports of capital goods not only to wipe off the outstanding arrears of replacement but also to meet the still greater requirements of new projects; moreover, the increased money incomes generated by the Plan will make themselves felt in increased demand for consumer goods available for export. Though the volume of exports is expected to increase substantially as a result of the Plan, it would appear that, taking into account the likely import requirements, shortage of foreign exchange resources may be a serious bottleneck if a development programme of the order contemplated in the Plan is to be implemented without supplementary external assistance. The volume of imports at each stage of the implementation of the Plan as well as at the end of the five years would, therefore, depend to a great extent on the degree of control exercised over them, which in turn would be determined by the availability of foreign exchange. It goes without saying that during the period of the Plan there will have to be a close regulation of exports and imports. Without controls in this vital sector the country will not be able to utilise to the best advantage the resources available to it for development.

The increase in exports in the period of the Plan is expected to take place mainly in cotton piecegoods, jute yarns and manufactures, manganese ores, oils, coal and coke, black pepper, tobacco and woollen manufactures. In addition, there are also a number of newly developing lines of exports which are expected to show significant progress in this five-year period. If producer goods are defined so as to include unprocessed and partly processed raw materials as well as manufactures and semi-manufactures used in production, they have in recent years constituted about two-thirds of total imports of India. The Plan will on the whole tend to reduce the dependence on agricultural raw materials, but imports of processed raw materials will have to be stepped up considerably for meeting the production targets in the Plan. In spite of the development of the petroleum refinery and the power alcohol industry in this period imports of oil, for instance, may have to be maintained at a high rate up to 1955-56. The effect of the Plan on imports of manufactures and semi-manufactures (including intermedite products) used for production would by and large be the same as on imports of processed raw materials. Imports of locomotives for normal replacement purposes are likely to be completely eliminated. In a few cases where the projected expansion in domestic production is likely to exceed the increase in domestic requirements, imports may tend to fall, *e.g.*, in respect of fertilisers, aluminium, cement and artificial silk-yarn. But in all others, and particularly in the case of capital equipment, heavy durables and metals there will be significant increase in the level of imports.

In the nature of things there will have to be a measure of flexibility in commercial policy, but it is necessary to adhere to certain broad principles. In the context of planning,commercial policy has to serve the following ends :

(*a*) It must help to fulfil the production and consumption targets in the Plan;

(*b*) The accent of policy throughout must be on maintaining a high level of exports;

(*c*) The deficits in balance of payments must be kept within the foreign exchange resources at the disposal of the country in any given period;

(*d*) The consumption of exports as well as of imports must, as far as possible, fit in with the fiscal and price policies which have to be followed for the implementation of the Plan; and

(*e*) There must be, to the extent practicable, a measure of continuity of policy so that trade relations with other countries in respect of exports and imports and the plans of domestic industry and trade are not frequently disturbed.

Conditions of foreign trade are apt to change frequently and sometimes violently; precise year by year targets for exports and imports over the period of the Plan would, therefore, serve little purpose. There is also the additional factor that the timing and magnitude of external assistance which might be available cannot be precisely foreseen. The five principles mentioned above, will, however, in any given set of circumstances, indicate broadly the appropriate policy which has to be followed.

## EXTERNAL ASSISTANCE

Some reference is made above to external assistance for the fulfilment of our first Five Year Plan. Even after taking credit for the budgetary resources that are likely to become available to the Central and State Governments for financing the Plan, and after allowing also for deficit financing to the extent of Rs. 290 crores, it is estimated that there still remains for the five-year period a gap in resources of the order of Rs. 521 crores to be made good from external assistance and by additional measures of taxation and borrowing or by further deficit financing. In the two years 1951-52 and 1952-53, foreign grants and loans extended to Indian amounted to about Rs. 189 crores.

The following details of the same are given in the Five Year Plan Progress Report, published by the Planning Commission.

| | *(Rupees in crores)* |
|---|---|
| *International Bank* : | |
| Undrawn balance of loans extended in the pre-Plan period. | 9.0 |
| Steel project loan. (December, 1952) | 15.2 |
| Loan for Damodar Valley Project. (Jan. 1953) | 9.5 |
| *U. S. Food Loan* | 90.4 |
| *Grants under the Colombo Plan* : | |
| From Canada. | 13.3 |
| „ Australia | 6.1 |
| „ New Zealand | 0.9 |
| *U. S. Technical Co-operation Assistance* : | |
| Technical Co-operation Agreement January 1952 | 23.8 |
| Supplementary Technical, Co-operation Agreement, November, 1952. | 18.0 |
| *Other Aid* : | |
| (including aid from Norway and from the Ford Foundation) | 2.8 |
| TOTAL | 189.0 |

## I.M.F.'s Estimate Of India's Need for External Assistance

The International Monetary Fund (I.M.F.) has estimated that India needs approximately $ 400 million in foreign aid to complete its five-year economic development plan 'so essential to the well-being of the people of India and so important to the survival of democracy in Asia.'

The estimate was contained in the report made public in February, 1954—of a four-man I.M.F. mission, which visited India in the winter and spring of 1953, at the request of the Government of India, to study monetary and financial problems arising from the Five Year Plan, which covers the period 1951-56.

Explaining the need for the foreign aid, the report said, 'Much of the foreign resources for the Plan consist of India's holdings of foreign exchange. Assured assistance from various countries and the World Bank will provide much of the remaining foreign resources. There is, however, a residual item of about Rs. 2,000,000,000 ( $ 400 million) not covered by domestic resources or assured foreign resources which presumably can only be met by additional foreign assistance. Failure to secure such aid would necessitate a reduction in investment unless additional resources could be secured at home.'

The mission found that it would be 'desirable' that a large part of the proposed foreign aid, be supplied 'on a grant basis'. 'This is not to imply that India could not repay any loans it contracts', the report said : 'Rather, it is a recognition of the fact that income levels are so low, and domestic savings so limited that repayment of loans would necessarily slow down the rate at which consumption standards can rise and development, be accelerated in the future.'

The report added that 'even without grants, India must go forward with its development with the aid of whatever capital it can borrow.' The mission noted that although the Indian Government had recently incurred new obligations to the United States and the Fund, India's general position on foreign indebtedness was 'enormously improved'. 'With a proper development programme and sound monetary policies', it declared, India should be able to meet its future foreign obligations.

## U. S. AID FOR PROJECTS

In January, 1954, two operational agreements were signed between the representatives of the Governments of India and the United States, relative to the use of U.S. aid provided for the year ending 30th June, 1954.

These agreements sanction the following expenditure.

*Fertilizers* : 1.15 million have been made available for the purchase of 5,000 tons each of urea and ammonium sulphate nitrate which will be used to demonstrate, test and popularize the use of such nitrogenous fertilizers in India. A demonstration programme will be carried out in community development project areas and in areas covered by the National Extension Service (both forming part of the schemes under the Five Year Plan).

*Damodar Valley Project* : The period during which the consultant services of the Hazra Engineering Company of Chicago will be available to the Damodar Valley Corporation is to be extended to 30th June 1956. A sum of 6,32,000 has been provided for this purpose.

## STATE MONOPOLY OF FOREIGN TRADE[1]

The system of export and import controls has been proved inadequate for the needs of a planned trade policy for India. Welcoming the appointment of a Committee to report on State monopoly of foreign trade, N. S. Pradhan suggests in this article the establishment of a Foreign Trade Corporation in which a majority of shares will be held by the Government.

Editor. 'Janata'

---

[1] An article by N. S. Pradhan in Janata, Organ of the Socialist Party, May 15, 1949.

A press report recently (April 12, 1949) announced the possibility of appointment of a six-man committee to report on State monopolisation of export and import of some commodities. The Committee will be headed by Dr. Punjabrao Deshmukh with four other members of the Constituent Assembly and two members representing Chambers of Commerce. Coming at a most opportune moment such a step on the part of the Government is indeed welcome and laudatory. Foreign trade being so vital to the economy of any country the Government must invite the considered opinion of all sections of the public and should not confine the scope of their inquiry to commerce and industry alone. As is very natural stiff opposition from all vested interests is expected and the Committee will do well to rally academic opinion from the Indian Universities. It is highly dangerous for such a responsible Committee to rely solely on the evidence adduced by the commercial and industrial interests. The latter command immense resources and will unreservedly mobilise them to frustrate the intentions of the Government. So long as sophists can be hired, there will be no dearth of arguments and statistical concoctions that go by the name of industrial research by private employers. Disinterested and dispassionate University opinion alone can render a temperate touch to the investigations of the Committee.

State monopoly of foreign trade augurs well for a socialist future. It will be proper, on the eve of such a momentous decision to take a purview of the broader implications and potentialities of state monopoly of foreign trade. The foreign trade of India forms a very insignificant proportion of the internal trade of the country. Yet its consequence in victualling the sinews of post-war reconstruction makes out a very strong case for its planning, regulation and control by the state.

## THE SYSTEM OF CONTROLS

Our foreign trade is at present in private hands and the state is making unsuccessful efforts at regulation and control by the aid of ill-conceived controls which are thoroughly mismanaged. The scandalous import licences racket which was going on until quite recently is a case in point. Thus, one is surprised to find today that on the one hand, precious foreign exchange resources are thoughtlessly frittered away in importing frivolities and knick-knacks; while on the other, commodities of signal importance to the national economy are exported heedlessly at ridiculously low prices. Every such bargain enriches the opulent trader and leaves the country the poorer for all his wealth.

Export-import controls are expedients in an emergency and do not necessarily point to a socialist economy as does state monopoly of foreign trade. Such controls are one step below state monopoly. They are jealous weapons calling for cautious handling and have but limited efficacy. Such controls will suffice only under the postulate of laissez-faire. Anticipating all opposition, we must realise that the present is the most opportune moment for the assumption of state monopoly. Planned foreign trade and planned banking are the *sine qua non* of a planned economy. Uncontrolled foreign trade will only delay the industrial development of India and perpetuate its role as "the drawer of water and hewer of wood" of industrially more advanced countries.

## Benefits Of State Monopoly

State monopoly of foreign trade will confer several benefits, of which even the semblance will not be gleaned from the present state of unbridled foreign trade. Such a monopoly would protect the national interests without necessitating resort to the cumbersome method of raising tariff walls, which per force invite retaliation and lead the world into a chaos of warring economic cells. State monopoly further enables centralisation in the matter of exports and imports and endows us with all its attendant benefactions. It does away with the necessity of changing individual trade agreements with different countries. Under a system of state monopoly it becomes possible to offset losses on imports by profits on exports or vice versa. For a considerable time in the near future India will continue to import food products at a loss. This loss can be sought to be countered by the operation of state monopoly. It can insulate the internal economy from the baneful effects of changing external values of currencies. This possibility, however, will be ruled out if the International Monetary Fund operates according to the expectations and the ideas engendered by its sponsors. Considerations of profit motive will be replaced by those based on economic, social and even political foundations because direct regulation of trade vis-a-vis a particular country will now become facile and practicable. Specialised monopolistic state trading organizations will result not only in greater efficiency but also reduced overhead costs. Thus, the rapacious middleman will be eliminated though his services will be retained at cheap and efficient levels. Finally, state monopoly will be a boon to indigenous enterprise, whose products will find an international market, where the state will now have secured a strong bargaining counter.

The Governor-General said the other day that we must look upon our indigenous handicrafts to earn foreign exchange. Up till now no effort has been made in this direction and we have failed to appreciate the value and importance of our handicrafts and arts, whose products command fantastic custom in the new world. Our ivory, brass and coir products, for example, are eagerly sought for and a market for them can be organised only under a state monopoly. Such products are more important to us, for they contain great value in small bulk and while they help fill our coffers they economise shipping space.

## TRADE POLICY

While advocating state monopoly, we do not adumbrate foreign trade as a weapon of international economic warfare. Yet the idea of completely free markets is repugnant and regressive. The home needs must be attended to before we indulge in internationalism for its own sake. The economic internationalism in vogue today is pregnant with the ideology of a dying colonialism. Such a philosophy envisages countries like India exporting groundnut worth Rs. 80 and importing the same as perfumery paying Rs. 1,500/. This is only one instance of the baneful effects of either a mistaken emphasis or deliberate villainy.

Our most peremptory needs of the day are capital goods for our industrialisation. Such goods range from small and big agricultural implements to the most complex and skilled machinery for hydro-electric generation. These goods are difficult to be had at present and we are compelled to import food at greatly inflated prices. But at the same time, we are confronted with the conundrum of huge imports of fountain pens, plastic straps, belts and other goods, without which we can very well afford to live. We also export huge quantities of bones and bonemeal, while the agricultural reformist cries hoarse for more manures and fertilisers. It is here that state monopoly is of the greatest advantage.

### FOREIGN TRADE CORPORATION

State monopoly to succeed must be extended to all commodities of foreign trade and should operate in all countries. An all-India Corporation for Foreign Trade, Under the Ministry of Commerce, should be established with specialised monopolistic ramifications all over the country. In all such undertakings the state can overcome its financial difficulties, by being a major participant to the extent of 51 per cent of the capital of these institutions. Private enterprise can still play a useful role by taking up the rest of the 49 per cent capital. Foreign capital, too, can be employed usefully and harmlessly on the same principles. All orders for imports should be invariably placed through this Corporation and similarly all exports should be made through this agency. The provincial agencies should organise procurement schemes for exports and thus ensure a major portion of the foreigner's rupee to the home producer. Our Trade Commissioners abroad can now play a more useful and active role. At present, they are more often than not a costly burden on the Indian Exchequer with no other duty than dubious market research. In the state monopoly system orders for imports will be placed abroad through them. This method is already being followed in procuring stores from abroad for the Indian Railways. The Trade Commissioners should vigorously undertake a study of foreign markets and advise the Home Government on the same. Orders for exports should also be received through this agency.

In the anticipation of the bogey of dearth of personnel for such a huge enterprise, we must state that this is a myth behind which the capitalists will always take shelter. It is high time that the bogey is exploded. The Government also is not immune from the influence of this argument. Lack of personnel is often put forth as the greatest single reason for the procrastination of a declared ideology of nationalisation. No doubt, we do experience a certain amount of difficulty in this regard but that is due more to a faulty method of selection. If it were not this our young University men would not be dragging wretched careers on paltry and disgraceful emoluments.

The idea of state monopoly and the principle of multilateral trade as envisaged in the Havana Charter can be reconciled. It is a popular misconception that these two are discordant. So long as we do not wish to resurrect mercantilism, our intentions are honourable and our will strong, we still will have a place in the International Trade Organisation.

After the publication of this article the Committee's report was published in August 1950. The Committee has endeavoured to strike a golden mean between absolute monopolisation of trade by the state and continuance of the same in private hands. The Committee says that wherever conditions of monopoly or semi-monopoly exist the Government should resort to state trading. As suggested by the present author, the Committee recommended the establishment of a statutory state sponsored Trading Corporation, with an authorised capital of Rs. 10 crores and a paid-up capital of Rs. 2 crores, of which at least 51 per cent should be held by the Central Government. The latter should guarantee the capital and a minimum dividend to the private shareholders. The Corporation should take over all the important import and export transactions of a commercial nature which are at present handled by the Government. The Corporation should be run on strictly business principles and as such should have on its executive board outstanding businessmen.

The Committee also recommended that the proposed Corporation should take the Government operations in respect of import of foodgrains, fertilizers, steel, East African cotton and also such operations emanating from the barter agreements concluded by the Government with other countries. The Corporation should have a monopoly of export trade in coal and raw cotton. The Corporation should pioneer in the matter of popularising and selling the products of our cottage industries abroad. It should be the duty of the Corporation to advise the Government from time to time on the advisability of withdrawing or extending state trading in the interests of the nation. It may act either as the principal or an agent for direct purchases and sales by any foreign Government in the Indian market. The Corporation may undertake negotiations with foreign traders on the request, on behalf and at the risk of Indian businessmen.

In November 1950, however, an announcement of the Ministry of Commerce, said that the Government of India had, for the time being, given up the idea of state trading; but that it would not hesitate to resort to the same if state trading seemed to be the best method under circumstances.

## FOREIGN TRADE OF THE U.S.S.R.

Soviet Foreign trade since the Revolution has been coloured by the aims set for foreign trade, the prevailing conditions of production and consumption at home, the world market conditions as they affected Soviet trade and the actual organization of foreign trade. The economic conditions at home and the state of world markets, brought about almost a breakdown in Soviet trade in the first few years of the Soviet regime. During the N.E.P., the U.S.S.R was able to restore her trading relations with the outside world, mainly due to the general economic recovery at home. The production had now reached the pre-war levels. Between 1921-1927, the sole aim of Soviet foreign trade was the restoration of trade relations with the outside world. These relations had almost completely broken down after the Revolution and during the Civil War. However, this was done without sacrificing the principle of centralized control. The foreign trade machinery was not yet perfected and many obvious defects were tolerated for the sake of maintaining central control over the country's foreign trade.

In the days of the Csar, Russia was mainly an exporter of agricultural goods. While agricultural production, no doubt, exceeded industrial production during 1921-27, the agricultural exports of the U.S.S.R. did not reach the 1913 level even in the best export year. This is explained by the increasing home demand for the same. Again, on account of the heavy industrial and mining losses of Russia during the Civil War, industrial exports, too, developed very slowly. While in 1913 Russia exported about 24 million tons of goods worth 6.696 million roubles, she exported in 1926-27 only about 10 million tons of goods valued at 3.267 million roubles. As between agricultural and industrial exports, the latter increased faster. While the exports of products like oil and petroleum products, rags and shreds, concrete, rose, the increase did not balance the fall in certain exports like lumber and timber products, flax, tow, etc. That the recovery in both industrial and agricultural production could not help appreciably in the recovery of exports of these items is explained by the smaller availability of exportable surplus due to increase in population and home consumption. These were good years in world trade and the difficulties of Soviet foreign trade are to be attributed more to domestic difficulties and defects in the organization of trade rather than foreign developments.

In this period, the import trade was also slow to develop. This was due not to any lack of demand for foreign products, but to a sheer impossibility to pay for the badly needed imports. The Soviet Government had repudiated the debts owed by Russia prior to the Revolution and hence Russian imports could not get even the simple credit terms from foreign exporters. Thus, most of the imports had to be paid for in gold and the accummulated reserves of foreign currency. Soviet Russia had an unfavourable balance of trade for the first five years of its regime. In 1923 and 1924, she had a favourable balance, the gains of which were offset by the negative balance of 1925. Similarly, the positive balance of trade of 1926 was followed by an unfavourable one in 1927.

In the initial stages of the N.E.P. an urgent need was felt for the import of mass consumption goods and as such some of these had to be paid for in gold. Later in 1923-24, however, producers' goods or raw materials required for manufacturing mass consumption goods accounted for $\frac{4}{5}$ of the total imports. Imports of raw materials like cotton, wool, hides, skins, leather, etc., increased. From the next year there was a marked increase in the imports of producers' goods. However, compared with the level of imports of producers' goods during 1909-13, the level of such imports during 1921-27 was very low. The producers' goods were needed mainly in order to restore productive capacities disrupted by the Civil War. However, now construction was on a very limited scale and being therefore unable to pay for its imports by exports of home commodities, the U.S.S.R. had to pay for its essential imports mainly in gold.

With the beginning of planning, the foreign trade takes a new turn. The first Five Year Plan envisaged a substantial expansion of foreign credits, and expansion of exports of agricultural and industrial raw materials and even finished goods. But the development of foreign trade during the first Plan did not keep to the course envisaged. This was due to several factors which obviously could not have been foreseen. In this period grain and livestock fell rather than grew as planned. This was unfortunately the period of the world economic crisis with a severe fall in the volume of world trade. Thus not only did the demand for Soviet goods fall but these goods yielded less foreign currency. The goods stored in warehouses by Soviet Trade Delegations in foreign countries had to be disposed of at particularly disadvantageous prices, so much so, that this forced liquidation of stocks was deemed in foreign countries as 'dumping'. Again, a similar difficulty was experienced in the exports of industrial raw materials. Although, there existed a demand for these, more quantities had to be exported on account of the sharp fall in prices.

The exigencies of the Plan made it impossible to cut imports, for the successful operation of the Plan depended on imports for the reconstruction of the old and the construction of new industries, as well as for the collectivization of agriculture. However, in view of the great shortage of foreign exchange, the imports of foodstuffs were restricted only to such products as cocoa, coffee, tea, herring, etc., which are either not produced or produced in small quantities in the country. Thus, except for 1929, throughout the first Plan period the U.S.S.R. had a negative balance instead of a positive one as planned. The expectations of foreign credits were falsified and wherever foreign private firms granted credits backed by State guarantee, these ultimately turned out to be severely disadvantageous from the

Russian point of view. Soviet Trade Delegations abroad were compelled by the existence of the unfavourable balance of trade to accept foreign credits despite their hard terms. In consequence, Soviet indebtedness to foreign countries mounted from 485 million gold roubles in 1928 to 1400 million gold roubles in 1932; the gold rouble being then equivalent of 0.5146 U.S. gold dollar. It is interesting to note here that while the world exports were falling both in value and volume between 1929-33, Soviet exports actually rose. In 1930 the Soviet exports were 12% greater in value than those of 1929. In 1932 world trade was down at 39% of its gold value level of 1929. Soviet exports stood at 62% of their 1929 level in gold value and approximately 128 per cent of their 1929 volume. This was made possible by strict rationing of foodstuffs and other goods of mass consumption, and adaptation of the trade organization to the prevailing circumstances. The Soviet exports included even such goods which were needed urgently for domestic consumption. In these years of the world depression, Soviet exports consisted of grains, oil and oil products, timber and timber mill products, furs, cotton tissues, sugar, butter, flax, tow, swing tow, tinned fish, coal and anthracite, oilcake, chemicals and pharmaceuticals, manganese ore, bladder, casings and sausage-skins, tobacco and tobacco products. The exports of foodstuffs formed in this period a high share in the total Soviet exports, *viz.*, 21% in 1929, 31·6% in 1930, 35·2% in 1931 and 22.5% in 1932. In later years exports of foodstuffs declined. But at this time, the considerations of earning foreign exchange took precedence over the urgent need for these articles at home.

Imports were the highest during this period. Soviet imports reached their peak in 1930-31, at a time when other countries of the world were anxious to cut down the imports to the minimum. In 1930, the world import trade was at 81% and 93% of its value and volume, respectively, as in 1929. At that time Soviet imports stood at 120% and 141% of their value and volume, respectively, as in 1929. This shows how urgently were the imports needed for the operation of the first Five Year Plan. The unfavourable balance of trade was fully anticipated and even hard credit terms from foreign countries were accepted by the U.S.S.R. It is needless to say that the imports of producers' goods increased in spite of the great and urgent demand for goods of mass consumption. Nearly 90 per cent of the imports consisted of producers' goods needed for the implementation of the Plan. They were machinery, boilers, apparatus, iron and steel goods, industrial raw materials like wool, cotton, hides and skins, leather, tans, dyes, non-ferrous metals, electrical equipment, rubber in sheets and raw latex; motor cars, motor cycles, bicycles and their parts, precision instruments, chemical and pharmaceutical products. This list gives the imports in order of their priority. Foodstuffs and articles of mass consumption came last.

From 1932 Soviet imports and exports began to fall sharply. This was due to the fact that progress was being made under the Plan. Equipment which could now be produced within the country was not required to be imported. The manufacturing industries developed at a greater pace than the extracting industries, with the result that the raw materials, which were formerly exported, could now be utilised in the home industries. As production of equipment for industries, tractors and agricultural machinery, and rolling stock progressed, the need to import the same was not felt with the same intensity. Thus, exports fell as the problem of earning foreign exchange for imports of this kind was no more a pressing one. A systematic attempt was made to achieve a favourable balance from year to year on account of the accummulated foreign debt which the U.S.S.R was anxious to liquidate, and for this purpose imports were cut more drastically than the exports.

The marked improvement in industrial and agricultural production in Russia was accompanied by a notable fall in Russia's foreign trade. Gradually, world conditions were becoming more favourable to Russian foreign trade and she could even secure long-term foreign credits on comfortable terms. In spite of this favourable atmosphere, Russian foreign trade declined during the second Five Year Plan, when the reduction of imports exceeded that of the exports. Between 1935-38, the U.S.S.R. achieved a substantial positive balance of trade. Exports fell from about 21 million tons, valued at 3.5 million roubles, in 1931 to about 9.6 million tons valued at 1.3 million roubles, in 1938. This reduction works out to 55.5 per cent in weight and 62 per cent in value. The greatest cut in exports was on account of grains, whose harvests were particularly poor in 1934 and 1936. Exports of oil and oil products were reduced systematically from 6.1 million tons in 1932 to 1.3 million tons in 1938, despite a rise in home production from 22.3 million tons to 32.2 million tons in the same period. Timber exports remained at the 1930-31 levels up to 1937. The export of Soviet furs declined due to difficulties of marketing and fall in world prices. For the same reason, the exports of cotton tissues suffered. The fall in the exports of flax, tow, chemical and pharmaceutical products was less drastic. While these exports were deliberately curtailed during the second Five Year Plan, the exports of iron and steel; iron and steel goods; machinery and equipment; coal and anthracite; fertilisers; and concrete were expanded.

During the second Plan, the exports of industrial products exceeded those of agricultural products. This was clearly due to development of productive capacity within the country and the consequent possibility of reducing imports of equipment for industry, agriculture and transport, and the exports of certain raw materials. It was also possible to expand the exports of certain other raw materials and certain industrial goods which were previously imported. Soviet exports of the last mentioned type consisted of agricultural machines, motor vehicles and spare parts, tractors, textile machinery, sewing machines, electric lamps, pig iron, coal, asbestos, concrete, fertilizers, salt, dressed furs, magnesite, tanning extracts, balsam, turpentine, coke, soap and paraffin. But it must be noted that these new export items did not together earn foreign exchange equal to that earned by any one of the major exports, *viz.*, grain, timber and timber mill products, oil and oil products,and furs.

It is very likely that the fall in imports during 1932-35 was due to the problem of earning foreign exchange rather than to the possibility of replacement by home products. Although, the productive capacity at home increased during 1933-35 the problem of foreign indebtedness was an acute one. When the situation eased a little, imports were allowed to rise from 1935 and this resulted in an unfavourable balance in 1938. Even in the years when imports were very low, most of these consisted of industrial equipment and raw materials for heavy industry, such as, machinery, boilers, apparatus and parts, iron and steel goods, non-ferrous metals and products, and electrical equipment. It is claimed by Soviet sources that the composition of Soviet imports changed in the period after the first Five Year Plan. In later years of the second Plan, more complex industrial goods and still later raw materials for industries were only imported. In the first Plan period agricultural machinery, like tractors, was imported and it accounted for a major portion of the total imports of machinery. During the first Plan, the imports of motor vehicles were an important item. Later, the imports of motor vehicles were drastically reduced and by 1937, the U.S.S.R. was exporting them to Turkey, China, Mongolia, Tuva, Iran, etc. Another significant development in the composition of Soviet import trade during the second Plan was the significant increase in the imports of raw materials like copper, zinc, lead, aluminium, rubber, and cotton. In spite of the increased production at home, it must be noted that the level of per capita consumption in the U.S.S.R. on the eve of World War II was very low in comparison to other countries of the world. Clearly, therefore, the curtailment of imports of mass consumption articles was due to the considerations of foreign exchange and if the productive capacities within the country had really created export capacity of the U.S.S.R., she would have imported the goods needed by the people in larger quantities.

## THE COMPOSITION AND DIRECTION OF SOVIET FOREIGN TRADE

The foreign trade of Russia forms a very small part of world's total trade. In fact, her share in world trade is lower than what it was in Tsarist Russia. In 1913, Russian export trade was 4.2. per cent of world exports. The years 1930, 1931, 1932 were peak export years for the U.S.S.R. But even then the exports amounted to between 2 and 2.3 per cent of total world exports. On the eve of the second World War they were less than 2 per cent. Similarly, the import trade of the U.S.S.R. is insignificant in world context. The Soviet imports amounted to only 0.9 per cent of total world imports in 1937.

The following are the chief exports of the U.S.S.R. Primary products of agricultural export :—1. grains, 2. butter, 3. raw hides and skins, 4. bristle, 5. beans, 6. eggs, 7. bacon and 8. medical plants.

Finished and semi-finished goods of agricultural origin:—1. sugar, 2. oil-cake, 3. tinned fish, 4. tobacco and tobacco products, 5. bladders, casings, and sausage skins, 6. caviar, 7. vegetable oils, 8. glycerine.

Industrial exports:—1. timber and lumber mill products, 2. oil and oil products, 3. furs, 4. cotton tissues, 5. flax, tow and swing tow, 6. manganese ore, 7. chemical and pharmaceutical products, 8. iron and steel products, 9. machinery and equipment, 10. cotton, 11. rags and shreds, 12. coal and anthracite, 13. asbestos, 14. iron ore, 15. fertilisers, 16. cement.

Following are the chief items of import of the U.S.S.R. : 1. Machinery, 2. iron and steel goods, 3. non-ferrous metals and goods, 4. electrical equipment, 5. wool and woollen goods, 6. cotton, 7. rubber in sheets and raw latex, 8.

chemicals and pharmaceuticals, 9. precision instruments, 10. motor vehicles, bicycles and parts, 11. animals, 12. hides, skins and leather, 13. tans and dyes, 14. tea, 15. rice, 16. fish and 17. cotton tissues.

The following table gives a broad outline of the direction of the foreign trade of the U.S.S.R.

DIRECTION OF SOVIET TRADE, 1938
(*in million roubles*)

| | Exports from the U.S.S.R. | Imports to the U.S.S.R. | Balance for the U.S.S.R. |
|---|---|---|---|
| Great Britain | 375.1 | 240.3 | +134.8 |
| Germany | 88.3 | 67.2 | + 21.1 |
| U.S.A. | 96.7 | 405.9 | —309.2 |
| France | 59.7 | 39.4 | + 20.3 |
| Belgium and Luxemburg | 116.8 | 64.2 | + 52.6 |
| Netherlands | 92.8 | 102.5 | — 9.7 |
| Italy | 0 | 0.1 | — 0.1 |
| Czechoslovakia | 13.2 | 19.4 | — 6.2 |
| Poland | 7.8 | 1.5 | + 6.3 |
| Finland | 1.9 | 3.4 | — 1.5 |
| Estonia | 7.1 | 7.1 | 0.0 |
| Latvia | 8.8 | 8.4 | + 0.4 |
| Lithuania | 11.6 | 12.7 | — 1.1 |
| Sweden | 13.4 | 27.4 | — 14.0 |
| Norway | 21.6 | 9.9 | + 11.7 |
| Denmark | 27.4 | 5.1 | + 22.3 |
| Iran | 58.0 | 63.8 | — 5.8 |
| Mongolia | 69.8 | 38.5 | + 31.3 |
| China | 44.1 | 68.5 | — 24.4 |
| Tannu-Tuva | 5.9 | 2.7 | + 3.2 |
| Afghanistan | 14.8 | 13.7 | + 1.1 |
| Turkey | 22.7 | 22.7 | 0.0 |
| Japan | 6.1 | 17.6 | — 11.5 |
| Australia | 0 | 50.9 | — 50.9 |

Generally speaking the foreign trade of the U.S.S.R. is carried on more with European countries than eastern countries. However, the share of the European countries in the foreign trade of Russia has decreased from about 80 per cent in the Tsarist days to about 65 per cent at the outbreak of the second World War. During the war foreign trade with and especially imports from the U.S.A. had tremendously increased due to the Lend-Lease operations. During war years military goods comprised between one-third to one-half of the total exports from the U.S.A. to the U.S.S.R. The U.S.A. sent to the U.S.S.R. large quantities of machinery and raw materials, as well as wearing apparel and foodstuffs on Lend-Lease basis. Normally the Russian exports to the U.S.S.R. comprised of furs, lumber with products, animal products for further processing, raw materials for textile and paper industries, industrial raw materials like manganese ore, anthracite, asbestos, etc. During the war some new items were exported by the U.S.S.R., *e.g.*, lumber and pulp wood, magnesite, lead, diamonds and emeralds, platinum metals, crude phosphates, etc.

Certain countries have been traditional markets for Russian goods. For instance, Russian wheat was mainly taken up by Great Britian, Germany, Italy, Greece, Turkey, France, Holland and Norway. The exports of rye went to Great Britain, Norway, Germany, Holland, Finland, Denmark Latvia and Estonia. Saw timber was exported to Great Britain, Germany, Holland, Belgium, France, and Italy. Timber products went to Great Britain, Germany, Holland, Latvia, France and Japan. The most important customers for Russian furs have been Germany, Great Britain, France and the U.S.A. Russian oil and oil products were mainly imported by Great Britain, France, Germany, Italy, Belgium, Spain, while manganese ore was exported to the U.S.A., France, Belgium, Germany, Holland and Italy. In general the basic timber and agricultural products and raw materials required in industries were mainly imported by the industrially advanced countries of Europe, while finished products from the U.S.S.R. were imported by the eastern countries.

It is often emphasized that the direction of the foreign trade of the U.S.S.R. is determined largely by political and like considerations than by purely commercial considerations. It must, however, be remembered that this condition prevails in the case of any two countries. And no country will have close commercial ties with another with which it has strained political relations. What is, however, important to note is that in the case of the U.S.S.R. the manipulating of foreign trade relations is a much simpler task, considering the state monopoly of foreign trade. This foreign trade can, therefore, be switched with greater ease without altering the tariff and other agreements existing between the U.S.S.R. and the country in question. Here again, the U.S.S.R. may choose its suppliers with greater ease than her buyers.

After the second World War, the direction of Russia's trade is considerably altered and she has closer trade relations with the communist countries in Europe and elsewhere, than with other countries.

## THE ORGANISATION OF SOVIET FOREIGN TRADE

The organization of Soviet foreign trade must be studied in the background of certain factors which were operating at the beginning of the Soviet regime and which influenced its peculiar evolution. These were, firstly, the conditions inherited from the Csardom; secondly, the attitude of the rest of the world towards foreign trade of the U.S.S.R. and the methods of Soviet trade; and lastly, the changing facet of Russia's economy.

The world outside was clearly inmical towards the new State. Apart from the general economic blocade, enforced by foreign countries, the foreign banks imposed on Russia, what is known as a 'gold blocade'. This blocade continued until 1920 and it was only after the conclusion of a trade agreement with Great Britain in March 1921, that we can say that normal trade relations with countries outside Russia began. Several trade agreements, such as with Germany, Finland, Estonia, Latvia, Poland, Norway, Czechoslovakia, Austria, Italy, etc., followed.

In december 1917, a Governmental decree made it obligatory to require a permit from the Commissariat of Commerce for import or export of goods. This involved no new principle or practice of trade and, in effect, meant only the continuation of the licence system of the war years.

By April 1918, the nationalization of foreign trade was proclaimed. All commercial transactions in the foreign countries had to be carried only through the State organs specially set up for the purpose. However, the organizations were not specifically mentioned. Purchases in foreign countries were sometimes made through the representatives of the Commissariat of Commerce and Industry in foreign countries. But during 1918-20 no definite machinery for foreign trade was evolved. Nor was any urgent need felt for the same considering the economic blocade of Russia and the precipitate decline in the country's industrial and agricultural production.

In 1920, the Commissariat of Commerce and Industry was converted into the People's Commissariat of Foreign Trade. This was a Government agency for planning, regulating and controlling foreign trade and for implementing actual commercial transactions. This was the period of 'war communism' and it is not surprising that with the general trend towards super-centralization of all economic activity the foreign trade was also completely centralized in this agency. This Commissariat could not have much initiative as it could only market such stocks as were allocated for export. The Commissariat operated the monopoly of foreign trade through 11 Trade Delegations abroad, at the end of 1920.

Under the N.E.P. announced in 1921 the co-existence of a 'private sector' was made possible. In this period, although the State monopoly of foreign trade was recognized, commercial transactions were decentralized and private capital and initiative were allowed to partake of foreign trade. The N.E.P. accepted the principle of the coexistence of the two sectors, without abandoning the principles of nationalization and planning.

Monopoly of foreign trade was desired because it could protect the home market from competition without necessitating the raising of tariff walls. It could further enable the State to align exports and imports with the Government's general foreign trade policy and this would do away with the necessity of frequent revision of trade agreements and treaties. Such a monopoly was also desirable as it would eliminate the disturbing effects of the foreign exchange market on the internal currency. Foreign exchange rates would be fixed by the Government and would serve as a technical device of accountancy without having any effect on the actual course of exports and imports of the country. Trade with any country could be regulated directly with reference to economic, political and social considerations. Further, it was thought that monopoly of foreign trade reduces overhead charges, besides providing a stronger bargaining counter vis-a-vis other countries.

Thus, State monopoly of foreign trade became the cornerstone of the Soviet foreign trade system, although the forms it assumed changed with changing conditions.

In the first years of the N.E.P. the aim set for foreign trade was to rehabilitate the country's economy. It was, therefore, decided that more freedom would be allowed to the State and co-operative organiazations in imports and exports though the State's monopoly would be maintained. Such bodies were Co-operative Associations of various kinds; special joint stock companies set up for this purpose either with Soviet capital only or with Soviet and foreign capital, and some foreign societies which held special concessions. These were allowed freedom to sell goods manufactured by them only or buy from abroad only those goods required in their own manufacturing activities. During the first years of the N.E.P. the socialised sector was predominant in both export and import trade. The export trade was carried on mainly by State organizations and Soviet joint stock companies, while the share of other exporting agencies was insignificant. On the import side various government departments and administrators of industries sent applications for imports to the People's Commissariat of Foreign Trade. These applications would then be sent to the Soviet Trade Delegations abroad. State organizations and joint stock companies could buy abroad independently provided they submitted their contracts first to the Commissariat of Foreign Trade for approval. Even private manufacturers were allowed to buy abroad but all trading transactions had to be effected through the Trade Delegations abroad.

The Trade Delegations later on set up specialized departments for different commodities. In the beginning this absence of specialization was the cause of several unsatisfactory results. As experience gathered, the Commissariat of Foreign Trade concentrated gradually on planning, regulating and controlling foreign trade, leaving the operational work to the Gostorgs, *i.e.*, the State export-import organizations. The Commissariat prepared the export-import plan, set the export-import quotas and fixed customs duties and price limits on mass exported or imported goods. It also entered into international treaties and agreements. This, in brief, was the organization of Soviet trade in the period of recovery during which the economy of the U.S.S.R regained its pre-revolution level.

In October 1925, a reorganization of the system was effected. Specialized companies with supply and industrial organizations, dealing in particular goods, as shareholders, were set up for basic Soviet goods like timber, butter, coal, eggs, furs, etc. In the import trade also specialized companies were started in different imported products, *e.g.*, Textile-import (textiles), Kozhimport (leather and hides), Selmashiimport (agricultural machines), Metallimport (metals), Electroimport (electrical equipment), Khimimport (chemicals), etc. These export and import companies traded through their corresponding specialized departments of the Trade Delegations abroad. The effect of the new system was that the possibility of several agencies selling to and buying from abroad the same goods was done away with and there was now, a single 'Soviet Merchant' trading in each commodity. In November 1925, the People's Commissariat of Foreign Trade and the People's Commissariat of Home Trade were merged to effect further co-ordination of apportioning products between the home and foreign markets. A new department of this new Commissariat of Trade was made the central apparatus of planning, directing, regulating and controlling foreign trade. It was called the Administration of Foreign Operations. It had specialized departments dealing with Trade Delegations, Planning, Licensing, Economic Transport, etc.

Further organizational changes came in 1930-31 by which time the home economy as well as the conditions of the world market had undergone important changes. At this time private trade had become almost negligible and the entire home trade was in the hands of co-operative or state organizations. The conditions at home called for an organized export at a time when a world trade crisis was developing. The Soviet export drive was the subject of a bitter press campaign against this country and was referred to as Soviet dumping of goods produced by forced labour.

In 1930, the existing multiplicity of organizations trading in the same goods was removed. Export and import joint stock companies were amalgamated into monopolistic export and import corporations which acted for the Commissariat of Trade. These corporations alone were responsible for planning, operational and technical work connected with the import and export of the goods in which they specialized.

These corporations were accorded the status of legal persons and worked on the principle of centralization and specialization.

In November 1930, the People's Commissariat of Trade was split into the People's Commissariat of Supply and the People's Commissariat of Foreign Trade of the U.S.S.R. This was done on the realization that the distinct nature of the form and method of trading at home and abroad needed a reconstruction in the system and control of home and foreign trade. The People's Commissariat of Foreign Trade did not interfere in the daily duties of the monopolistic corporations but concentrated mainly on planning, managing and controlling foreign trade. It could appoint high-powered commissioners in various parts of the country and especially regions of foreign trade importance. These commissioners, in general, served as the eyes of the Commissariat in their respective regions.

Now all the export and import transactions with foreign firms were made as previously through the Soviet Trade Delegations abroad, but in practice all the technical work was done by the export and import corporations with the result that the burden and the expenses of the Trade Delegations were reduced and their efficiency increased. This reorganized system enabled the U.S.S.R to maintain her exports at the 1929 level, even though the world crisis had brought about a severe decline in the volume of world trade.

From July 1935, it was decreed that all export and import transactions thenceforthwith should be negotiated within the U.S.S.R. It allowed the export, import and transport corporations to conclude transactions with foreign countries without first taking the sanction of the Commissariat of Foreign Trade. They were also allowed to issue and accept bills of exchange without previous sanction. The foreign firms were to deliver goods in the U.S.S.R. Soviet goods were no longer sold from the warehouses maintained abroad but were effected by show of samples, standards and descriptions, c.i.f. and f.o.b. Accounts had to be settled in the U.S.S.R. Foreign ships were to be chartered in the U.S.S.R. by the transport corporations. Formerly, this was done by corresponding Soviet agencies abroad, which were now closed down. A reduction in the number of export and import corporations was brought about by the amalgamation of some and closing down of others. The elaborate machinery of the Trade Delegations abroad was reduced and some of their expert staff was transferred to the monopolistic corporations at home.

## THE SYSTEM OF SOVIET FOREIGN TRADE ON THE EVE OF THE SECOND WORLD WAR

The foregoing developments resulted in a system of foreign trade which may now be briefly summarised. The foreign trade system of the U.S.S.R. comes under the People's Commissariat of Foreign Trade. It is responsible for direction, planning and control of the Russian foreign trade. The work of this commissariat abroad is done by the Torgpredstva or the Trade Delegations. Then there are the monopolistic corporations which carry out export-import transactions. Almost all export-import transactions are negotiated within the U.S.S.R. and only a small fraction abroad. There are only a few joint stock companies like the Amtorg Trading Corporation in the U.S.A., the Russian Petroleum Products Co. in Great Britain and the Black Sea and Baltic Insurance Co., as also a shipping insurance company working in Great Britain.

The Commissariat looks after 1. making of international agreements and treaties of trade; 2. it takes measures to uphold the principle of state monopoly of trade and also the measures to attain the aims set for foreign trade; 3. it drafts the general foreign trade plan for the approval of the Government after examining the plans submitted by the monopolistic corporations; 4. it controls the various trade organs at home and abroad in carrying out the approved plans for foreign trade; 5. it fixes rules and regulations for foreign trade; 6. it looks after the improvement of the quality of the exports and the possiblity of replacing imports by home products, 7. it plans the requirements of foreign exchange and obtains credits from abroad, 8. it studies customs and tariffs and supervises the customs administration; 9. the capital construction needed for foreign trade is directed by the Commissariat; 10. it also directs the training and selection of personnel connected with foreign trade.

The Commissariat of Foreign Trade has the following departments.

(1) The Department of Planning and Economics, (2) the Export Administration, (3) the Import Administration, (4) the Eastern Department, which is responsible for trade with the Eastern countries like, the Mongolian People's Republic, the Tuva People's Republic, Western China, Afghanistan, Iran and Turkey, 5. the Chief Transport Administration, 6. the Foreign Exchange and Finance Administration, 7. the Department of Trade Delegations. Besides these main departments, there are other departments also like the Department of Control, Book-keeping and Audit, The Chief Customs Administration the Department of Concessions, Capital Construction, Arbitration, the Administration of the People's Commissariat of Foreign Trade Schools, etc.

The Commissariat has its commissioners with considerable powers in various provinces. These are the 'eyes' of the Commissariat in their respective areas and they regulate and control the activities of the export organizations within their respective areas. The Commissioners are assisted by auxiliary bodies called Export Conferences in each republic. At lower levels, there are district Executive Committees.

The Commissariat is represented abroad by its Trade Delegations. On the eve of the second World War, the

U.S.S.R. had Trade Delegations in Great Britain, Belgium, Germany, Greece, Denmark, Iran, Spain, Italy, Latvia, Lithuania, the Mongolian People's Republic, Norway, Poland, Turkey, Tuva, Finland, France, Estonia, Czechoslovakia, Sweden and Japan. The Trade Delegations promote commercial and economic relations between the U.S.S.R. and the countries where they are accredited. They plan, regulate and control Soviet Export-Import activities in those countries. They grant import licences for export to the U.S.S.R., certificates of origin, transit permits, sanction contracts of the Soviet organizations and supervise their fulfilment. They gather and diseminate commercial information. They also negotiate directly with the foreign buyers or the sellers.

The monopolistic corporations are 1. the export corporations, 2. the import corporations and 3. the transport corporations.

The All-Union Chamber of Commerce is an auxiliary body. It is not a state institution but a public body with membership open to state and public institutions, organizations and enterprises. It assists Soviet and foreign organizations in matters of foreign trade. It is meant for fostering the development of Soviet foreign trade, it supplies advice and information to Soviet organizations and foreign firms. It obtains foreign patents and registers Russian patents. It studies commercial legislation in other countries and advises the Soviet organizations accordingly. A Maritime Arbitration Commission and a Foreign Trade Arbitration Commission are attached to the All-Union Chamber of Commerce.

## Planning Of Soviet Foreign Trade

This task forms a part of the general plan of the economic development of the U.S.S.R. and it follows the same pattern of the general economic plan. There is a prospective plan covering a long period and operational plan for the year, quarter or even a month. The prospective plan ordinarily covers a period of five years and the operational plan one year.

Exports are planned by the Gosplan first sending general instructions about foreign trade plan to the Department of Planning and Economics of the Commissariat of Foreign Trade. This department passes them on to the export corporations after setting the limits for annual exports. These limits set up all the details such as quantities, qualities, prices, marketing expenses and the quotas for different countries. The export corporations send to the Commissariat detailed draft provisional plans. The Commissariat then draws a co-ordinated annual plan for the Government's approval. Before the concrete plans are made an assessment is made of the material balances, by the organizations which control the production and distribution of the various export commodities. The assessment of the material balances takes the form of the examination of (*i*) the volume of planned production, (*ii*) its marketable output, (*iii*) existence of stocks from the previous period, (*iv*) the amount of planned domestic consumption and (*v*) the amounts earmarked for exports or reserves. Thus, the exportable limits are now fixed up and (a) a plan of deliveries, (b) a plan of exports, and (c) a plan of sales are drafted. When the annual plans are approved the export corporations work out quarterly and monthly plans. Any alterations must be sanctioned by the People's Commissariat of Foreign Trade.

The Planning of imports is done in a similar manner. Prospective plans are drawn years ahead and they form a part of the general plan for the economic development. All Soviet organizations requiring raw materials, etc., send in applications to the Gosplan. The Gosplan scrutinises them in the light of possibilities of home production and the general aims of the annual plan for development. A sort of balance sheet is drawn and a provisional import plan is drafted. The Commissariat of Foreign Trade draws its own draft import plans on this basis after taking into consideration the trade agreements of the U.S.S.R. and the expected foreign exchange receipts from the export trade. The Import Administration of the Commissariat draws up an annual plan in consultation with the monopolistic import corporations. The import plans as drafted by the Gosplan and those of the Commissariat of Foreign Trade are then submitted to the Government for scrutiny, co-ordination and ratification. Import planning has to take into consideration the volume and value of imported goods, the countrics in which orders are to be placed and the general conditions and dates of payment. It must be noted that non-commercial factors do come into play in determining countries from which goods are to be imported. The quarterly plans are operational divisions of the annual plan and are drawn up by the import corporations and approved by the Import Administration of the Commissariat of Foreign Trade. When the import plans are approved they are carried out by import corporations. The procedure adopted for purchase of raw materials or auction goods is simple. These are bought at commodity exchanges in London, New York, Amsterdam or Brussels. The technique of purchase is the same as is followed in these markets. However, in the case of goods other than raw materials the procedure is different. The import corporations conclude at the end of each year general agreements with their regular domestic clients. After the ratification of the import plans executive contracts are made with these clients. These contracts contain details regarding import quotas, quality of imported goods, probable price, delivery conditions, commission rates and other commercial and technical details. Offers from foreign firms are received by the import Corporations, which are complied into competitive lists. Sometimes they enter into long-term contracts with foreign firms for the supply of definite quantities of specified goods, at stated periods, on definite conditions.

The balance of payments of the U.S.S.R. is also subject to planning and the foreign exchange plan forms its main component part. There is a commercial and a non-commercial foreign exchange plan. The non-commercial part relates to expenses and receipts in connection with diplomatic missions abroad, interest receipts and payments on foreign loans, payments to foreign concession holders, tourist traffic, etc. This part of the plan is prepared by the People's Commissariat of Finance. The foreign exchange plan is drawn on the basis of the export-import plans and submitted to the Commissariat of Foreign Trade for examination and approval. It then co-ordinates the plans of all the export, import and transport corporations, etc., in the commercial foreign exchange plan. Afterwards an over-all foreign exchange plan, including the non-commercial foreign exchange plan, is formed into a balance of payments plan, giving full particulars of the U.S.S.R.'s position with other countries.

# FOREIGN TRADE OF THE U.S.A.

## Export Trade

The U.S.A. began her new industrial life roughly from 1880 and by 1897 she appeared as a large-scale exporter. From thence throughout the present century American exports have expanded at a more rapid rate than that of any other country. In 1931, the U.S. exports amounted to about 13 per cent of the total exports of the world, while Germany accounted for 12.2 and the U.K. 11.1 per cent respectively. It is true that the U.S.A. is a great exporter of raw materials but her exports of manufactured goods have become an important factor in world trade. The American exports, which have found favour with the industrialized countries of the world, are raw materials like cotton, wheat, pork and pork products, tobacco and tobacco products, petroleum, lead, zinc and copper. The rapid industrialization of the country has also necessitated the U.S.A. to be a large importer of rubber, tin, coffee, wool, silk, sugar. In spite of large production at home the U.S.A. also imports large quantities of copper, iron ore, petroleum and cotton. American industries are diversified and to satisfy their growing needs, the U.S.A. has to tap raw materials from various parts of the world.

It is interesting to note that for the U.S.A. the domestic trade is more important than the foreign trade. But without the latter, the country would be much poorer. Foreign trade absorbs the surpluses of the American factories, farms and mines. It supplies the country with such goods from abroad as cannot be produced at home advantageously. It also affords opportunities for employment of great amounts of labour.

### INTERNATIONAL TRADE

| *Imports* | 1911-1913 | 1929 | 1931 |
|---|---|---|---|
| N. America | $ 2,328,900,000 | $ 5,736,300 000 | $ 2,735,200,000 |
| World Total | $ 20,465,000,000 | $32,687,600,000 | $18,675,200,000 |
| *Exports* | | | |
| N. America | $ 2,741,500,000 | $ 6,494,100,000 | $ 3,061,600,000 |
| World Total | $18,927,900,000 | $32,687,600,000 | $18,675,200,000 |

Between 1866-1870 the U.S. exports consisted of 57.62 per cent of crude materials and only about 15 per cent of finished manufactures. By 1926-1930, the crude materials' share accounted for 24-40 per cent and that of finished articles increased to 45.35 per cent. As the industrialization of the country proceeded, the U.S.A. began to export a wide range and variety of new products, whose production is peculiar to that country only. This growth of American exports was the other side of the medal of domestic industrialization and signified that these commodities were increasingly being made available for domestic consumption.

Along with the industrialization of the country, the U.S.A. has been continuously increasing her exports of machinery. While these exports amounted to about $ 7 million in 1865, they rose to $ 609 million by 1929 and constituted about 12 per cent of the total shipments of the U.S.A. The machinery exports include agricultural machinery and appliances, electrical devices of all kinds, industrial mechanisms, *e.g.,* mining machines, power driven metal-working devices, textile machinery, office appliances. These exports of machinery have contributed in large measure to the industrialization of other countries, which, in turn, have started producing similar goods, at times competing with those of the U.S.A. If motor cars are included in machinery exports, for 1929 we shall have to add another $ 539 million. The automobiles contributed to other forms of exports such as petrol and its products, whose exports in 1929 were valued at $ 561 million. The automobile exports also meant exports of various kinds of electrical machinery, copper, lead, zinc, different kinds of woods and certain classes of iron and steel.

The food exports of the U.S.A. have also been important. But their significance has been declining over years as a result of the rise of great food exporting countries like Canada, Argentina, Australia and New Zealand. The declining importance of the U.S. food-exports has also to be attributed to the growing efforts towards self-sufficiency in food by the erstwhile European importers of American food products. The U.S. exports of food and food products have been suffering from 1920 and the new competitors in this field enjoy the double advantage of small domestic population and reserve capacity for exports. Cotton is another important export of the U.S.A. In 1925, cotton valued at $1059 million, constituting about 21 per cent of the total shipments of the year, was exported by the U.S.A. The value of cotton exports fell in 1929 to $ 770 million and still less in the depression years. Even today, the U.S. cotton exports are the chief raw material exports but due to crop restriction and other price boosting devices, favourable opportunities have been afforded to the competitors of the U.S.A. in this field.

U. S. EXPORTS: PERCENTAGE DISTRIBUTION

| Year Average | Crude Materials | Foodstuffs | Manufactured food-stuffs | Semi-Manufactures | Finished Manufactures |
|---|---|---|---|---|---|
| 1911-1915 | 30.74 | 8.83 | 14.32 | 15.41 | 30.70 |
| 1916-1920 | 18.22 | 9.16 | 17.66 | 15.39 | 39.58 |
| 1921-1925 | 27.54 | 9.74 | 13.93 | 12.45 | 36.33 |
| 1926-1930 | 24.40 | 6.40 | 9.72 | 14.14 | 45.35 |

THE EXPORTS OF THE U.S.A.

| *Period* | | *Annual Average* |
|---|---|---|
| 1911-1915 | ... ... | $ 2,370.5 million |
| 1916-1920 | ... ... | $ 6,521.1 „ |
| 1921-1925 | ... ... | $ 4,397.0 „ |
| 1926-1930 | ... ... | $ 4,777.3 „ |

The first World War resulted in the demand for enormous quantities of goods from the U.S.A. Thus, during 1915-1920, the U.S.A. exported huge quantities of iron and steel manufactures, foodstuffs, explosives, chemicals and drugs. These goods were sold at the inflated wartime prices. The U.S.A. gained an increasing share of the world markets, which fact proved a distinct advantage when the war came to an end.

Considering the direction of the U.S. export trade we find that in the latter half of the 19th and the first quarter of this century, European countries absorbed 65 to 75 per cent of American exports. From 1925 onwards, however, the European countries account for about 50 per cent of the exports from the U.S.A. This means, however, that only the proportion of exports taken up by the European countries has fallen. In fact, quantitatively they are buying larger amounts of American goods. The share of Canada, countries of the two American continents and Asiatic countries like Japan, India and China has been going up. Thus, the export trade of the U.S.A. has been expanding into newer commercial areas and this is attended by larger benefits to the U.S.A. The industrialization of Canada, certain other American countries outside the United States, Japan and China was aided by U.S. exports to a considerable extent.

Canada is a part of the natural trade area of the United States. While during the industrialization of Canada, the U.S.A. supplied the necessary finished goods and equipment to Canada, the latter could supply to the U.S.A. timber, wood pulp, newsprint, copper, nickel, fish and furs.

The U.S.A. has also played a notable part in the industrial and commercial development of Latin American countries like Argentina, Brazil, Chile, Mexico and Cuba. For instance, while the U.S.A. exported all sorts of manufactured goods to Cuba, she imported from the latter mainly sugar and tobacco and less importantly iron, copper, manganese ores, fresh fruits and vegetables. Argentina, Brazil and Chile are also large buyers of U.S. goods and their development has been made possible by more or less settled political conditions since 1880 and by U.S. investments.

The U.S.A. has also played a notable part in the modern development of Japan and China. The U.S.A. has been an important exporter of raw cotton to Japan. In 1929, the U.S. exports of raw cotton to Japan amounted to $ 127.4 million which were equal to half the value of total exports of the U.S.A. to that country. In the same year 29·5 per cent of the imports of Japan came from the U.S.A. while 42.5 per cent of her total exports were taken up by the U.S.A. The foreign trade of China was also dominated by the U.S.A. The share of the U.S.A. in China's foreign trade came next only to that of Japan. China imported from the U.S.A. raw cotton, wheat, flour, tobacco, gasoline and kerosene, iron and steel, machinery and electrical equipment.

The United Kingdom dominates in the foreign trade of the Union of South Africa and Oceania. Both South Africa and Australia, however, take American imports like manufactures of various kinds, petroleum, tobacco, machineries of various kinds, automobiles and chemicals.

Countries on the industrial stage, as a rule, have been buying more of American crude materials and foodstuffs. In 1931 nearly 40 per cent of the U.S. exports to Europe consisted of manufactured goods. The proportion of imports of manufactures and crude materials, however, differ from country to country. In that year, for instance, about 18 per cent of Germany's imports from the U.S.A. were of manufactures, while 42.6 per cent consisted of crude materials and 21.6 per cent of foodstuffs. Of the total exports from the United States to the United Kingdom, in that year, 33.2 per cent were of manufactured commodities, crude materials 25 per cent and foodstuffs 27.6 per cent. Nearly three-fourths of the total exports to South America were of finished manufactures. The percentages for Oceania and Africa were respectively 75 per cent and 81 per cent.

At present the leading exports of the U.S.A. are machinery (industrial, electrical and farm), wheat and flour, automobiles, chemicals, petroleum, iron and steel, raw cotton, coal and coke and tobacco. Though the bulk of the exports consist of manufactured goods, agricultural products like wheat, raw cotton and tobacco figure prominently in the list of exports. Some of the exports form a large proportion of the total home production, *e.g.*, the U.S.A. exported in 1948, 41 per cent of her total cotton production, 34 per cent of wheat production, 28 per cent of tobacco and lubricting oils, 25 per cent of machine tools production, 20 per cent of farm machinery, 16 per cent of tin plate and 15 per cent of motor vehicles production.

In the early days of the economic development of the U.S.A. the great bulk of the exports consisted of farm commodities. Now agricultural products constitute between 1/4 and 1/3 of the total exports of the U.S.A. The decline in recent years in the exports of U.S. agricultural products is due to growth of population at home, the shift towards livestock farming and the policies followed by the Federal Government to boost up the prices of agricultural products. As regards direction of export trade, we find that the U.S.A. is now trading more with Canada, Latin America, Africa and the Middle East, than with Europe and Asia.

*Agricultural exports and imports as a share of total exports and imports, United States,* 1920-1949.

| Years | Agricultural exports as a percentage of total U.S. exports. | Agricultural imports as a percentage of total U.S. imports. |
|---|---|---|
| 1920-24 ... | 46 | 55 |
| 1925-29 ... | 38 | 53 |
| 1930-34 ... | 36 | 49 |
| 1935-39 ... | 26 | 51 |
| 1940-44 ... | 15 | 48 |
| 1945-49 ... | 28 | 45 |

Source : International Economics, Enke & Salera, p. 66

DIRECTION OF U.S. TRADE
*(Percentage of Total)*

| Geographic area | Exports | | Imports | |
|---|---|---|---|---|
| | 1936-38 | 1948 | 1936-38 | 1948 |
| *Western Hemisphere* : | | | | |
| Canada ... | 15.3 | 15.2 | 13.9 | 22.0 |
| Latin America ... | 16.3 | 25.1 | 21.8 | 32.9 |
| *Europe* | | | | |
| Western Europe ... | 38.1 | 33.2 | 24.3 | 13.5 |
| Eastern Europe ... | 3.7 | 1.3 | 4.1 | 2.1 |
| Africa and Middle East ... | 5.0 | 8.3 | 3.3 | 7.4 |
| Asia and Far East | 18.8 | 15.0 | 30.4 | 18.8 |

Source: International Economics, Enke & Salera, p. 67.

In a general way it can be said that since the beginning of the 20th century the U.S.A. always had an export surplus. Several factors have from time to time contributed to this phenomenon. The U.S.A. has for a long time been a capital exporting country and the Americans have made long-term investments in foreign countries, *e.g.*, in new railways, oil refineries, automobile plants, etc. A country having a large-scale net international investment has a sruplus of exports over imports. This surplus is measured by the size of the net long-term international investment. Another factor which has helped the U.S.A. in generating an export surplus is the relative instability of the American economy. This factor has been in operation only during some years. It has been observed that the depressions in the U.S.A. are not only numerous but they are also deeper than elsewhere. This results in the fall of prices, costs and incomes at home relatively to those outside. In such years, imports fall on account of the fall in incomes but exports tend to rise or at least are prevented from declining. This results in a net excess of exports over imports. Yet another factor stimulating exports is the American tariff policy. The U.S.A. has always been a high-tariff country, and when other countries do not retaliate against her, there is a tendency towards the emergence of an export surplus.

## IMPORT TRADE

After the Civil War, the industrialization of the U.S.A. was very rapid. But some countries of Western Europe, too, were rapidly advancing at this time. While the U.S.A. needed comparatively speaking, less manufactured goods from foreign countries, they needed certain American raw materials. From 1860 onwards the American manufactures grew by leaps and bounds. In that year the output of U.S. factories was $ 1800 million; it rose to $ 11,400 million in 1900 and $ 70,100 million in 1930. This rapid industrialization meant not only an intense but a much more varied demand for raw products. In spite of the vastness and variety of natural resources, the U.S.A. could not find all the raw materials needed for her industries, within her own borders. It must be emphasized that the industrialization of the U.S.A. was much more diversified than that of other industrial countries of the world. The demands of new industries were exacting and the U.S.A., therefore, had to import metals like nickel, tin, antimony, tungsten, manganese, vanadium, etc. These items by 1860 had not yet entered international trade.

The U.S.A. has also been importing sizeable quantities of the same class of products of which there are large resources in the country itself. This is due to the fact that certain industrial plants are localized in the U.S.A. These need specific kinds of minerals whose costs of production are lower abroad than at home. Thus the U.S.A. has often imported iron ore and concentrates, crude bauxite, copper ores and concentrates, crude petroleum, as well as the manufactures of these products. The same is true of the imports of certain agricultural products of which the U.S.A. is one of the largest producers in the world. Such imports, for instance, are animals, meat products, dairy products, vegetables, fruits, sugar, vegetable oils, seeds, nursery products, raw cotton, wool, flax and hemp.

Thus it is clear that the exacting demands made by the manufacturing needs have made the U.S.A. depend on foreign sources for certain goods, in spite of the abundance and diversity of nature's gifts within her own borders. This state of affairs has brought about the development of an opinion within the U.S.A. for a "self-contained America" by people, who repose great trust in the inventive genius of the American people for finding out suitable substitutes for products imported from other countries. It is difficult to understand how this could be achieved in the case of several non-ferrous metals, and certain tropical and sub-tropical products. And given the ability of the inventors, the wisdom of such a policy is very dubious, considering the enormous cost of finding the necessary substitutes, and also the exclusion of the U.S.A.that may result, from foreign markets for her surpluses.

The U.S.A. still imports large amounts of manufactured goods though the percentage of such imports is much less than in 1860. These imports are made on account of the peculiarities of foreign discovery or inventions, but often on account of the lower foreign costs. The imported manufactured goods consist of several kinds of textiles (cotton, wool, flax, jute, or silk); leather of various kinds, *e.g.*, patent, upholstery, for bags and cases, tanned leather from cattle, goats, reptiles; furs; vegetable oils, *e.g.*, tung, coconut, olive, colza, sesame, attar, lavender; paper stock; clay products; precious stones; iron and steel products; chemicals; toys; clocks and watches.

The imports into the U.S.A. of raw and partly finished goods come from various parts of the world. We give below a list of such imports and the countries which send them to the U.S.A.

| *Commodities* | *Countries* |
|---|---|
| Silk | Japan. |
| Copper | Chile. |
| Vanadium | Peru. |
| Nickel | Canada. |
| Tin | Malaya; Bolivia. |
| Maganese | Brazil; Russia. |
| Coffee | Brazil; Colombia; various countries of Central America; Porto Rico; Certain Far Eastern countries. |
| Rubber | British and Dutch Near Eastern dominions; Brazil and some other South American countries. |
| Sugar | Cuba; Porto Rico; Hawaiian Islands; the Philippines. |
| Petroleum | Venezuela; Mexico; Colombia; and some Latin American countries. |

| *Commodities* | *Countries* |
|---|---|
| Wool | ... Australia; New Zealand; Argentina; Union of South Africa. |
| Jute | ... India. |
| Cotton | ... Egypt; Peru. |

The direction of the import trade of the U.S.A. has changed considerably since 1860. At that time Europe supplied over 60 per cent of the U.S.A. imports. By 1920-1930, this proportion was reduced to about 30 per cent. In 1860, Asiatic countries were responsible for the supply of only 8 per cent of the total imports of the U.S.A. This proportion increased to about 28 per cent in the decade ending 1930. In recent times the importance of Canada, South America, Oceania and Africa has been on the increase in the import trade of the U.S.A. These changes are the obvious result of the shift in the relative importance of American imports. From the time of the Civil War the imports of raw materials have been of greater significance, with its natural consequence of a shift in the countries supplying those necessities. We have referred above to the rise of new and varied kinds of manufacturing industries in the U.S.A. and their exacting demands relating to raw materials. The U.S.A. has sought these raw materials wherever they could be found on the face of the globe. In 1929, 30 per cent of the total imports of the U.S.A. consisted of rubber, jute, tin, wood pulp, raw silk, crude petroleum, gums of various kinds, balsams, resins, oil seeds and vegetable oils. The change in the direction of import trade can be very easily realised by even a casual perusal of this list. As far as the import of manufactured goods is concerned, we find that a large number of commodities purchased by the U.S.A. fall generally in the category of luxury class and such other goods which the U.S.A. imports on account of the peculiarities of invention of foreign suppliers. The imports of finished goods include Oriental rugs, wearing apparel, manufactured silks, precious stones, art works, furs, ornamental glassware and pottery. The U.S.A. also imports foodstuffs as fruit, nuts, cocoa, cacao beans.

At present the leading imports of the U.S.A., in order of their importance, are coffee, oil, newsprint, paper base stock, cane sugar, crude rubber, wool, vegetable oils, copper, cacao, tin and furs. Thus the main imports are raw materials or foodstuffs.

### IMPORTS OF THE U.S.A.

| *Period* | | *Annual Average* |
|---|---|---|
| 1901-1910 | ... | $ 1,163.5 million |
| 1911-1920 | ... | $ 2,535.3 ,, |
| 1921-1930 | ... | $ 3,741.8 ,, |

### IMPORT TRADE : PERCENTAGE OF CERTAIN CLASSES

| Period | Crude Materials | Crude Foodstuffs | Manufactured foodstuffs | Semi-Manufactures | Finished Manufactures |
|---|---|---|---|---|---|
| 1901-1910 | 33.97 | 11.95 | 12.08 | 17.23 | 24.27 |
| 1911-1920 | 37.52 | 12.47 | 14.36 | 17.27 | 18.38 |
| 1921-1930 | 37.10 | 11.83 | 11.43 | 18.28 | 21.36 |

## TARIFF AND COMMERCIAL POLICIES OF THE U.S.A.

Throughout her history the U.S.A. had always a predominantly high tariff policy. The tariff system of this country has been influenced by the prevalent protectionist or free trade ideas, as well as by the vicissitudes of federal finance. Customs revenue occupied an important place and a surplus or deficit in the revenue would influence the tariff policy. It may also be noted that the tariff policy has often served as the battleground of the Republicans and the Democrats.

The first U.S. tariff was introduced by the Act of 1789 and it was a simple revenue measure imposing 8½% duties on foreign imports. During the Napoleonic Wars the American manufacturers prospered. But when these wars ended and the English competition revived, they agitated for protection. Thus the Tariff Act of 1816 enhanced the duties on imports to an average of 20%.

The Act of 1928 was variously called the "Black Tariff", "Woollen Tariff", the "Tariff of Abominations." This was a year of Presidential election. There were three aspirants: Democrat Jackson, and protectionists Clay and Adams. The low tariff Jackson party introduced a very high tariff thinking that the high tariff Adam's party could not reject it, if the protectionist votes were to be secured. As a result a bill which was loved by none became law and all tariffs were raised upwards.

This Act aroused the fury of the South and the Compromise Tariff Act of 1833 provided that all duties in excess of 20% should be reduced to that level by 1st July, 1842. However, depression set in and in 1842 all duties were raised to 33%, thus aiding recovery. Later on, in 1846, the Walker Tariff Act reduced the duties to 20%. In the crisis of 1857 there was a fall in prices and also in the Federal revenue. Hence duties were revised upwards by the Morril Tariff Act of 1861.

During the Civil War, the duties on imports were gradually raised to the average of 47%. After the War the farmers began agitation against high tariffs. By the Act of 1872, therefore, duties on tea, coffee, etc., were abolished. Other duties were reduced by 10%. This was known as the Free Breakfast Table policy. The country was once again in the throes of a depression and in 1875, the Act of 1872 was repealed and the duties were once again raised to their former level.

In 1888 the strongly protectionists Republicans won the presidential elections which were fought on the tariff issue. Republican Harrison defeated Democrat Cleveland. The McKinley Tariff Act of 1890 raised the duties to an average of 50%. This Act empowered the President to conclude reciprocal treaties. In the next presidential elections, the Democrats won and by the Wilson-Gorman Act of 1894, the import duties were lowered to 39.9%.

In 1909, under the moderate Republican influence the Payne-Aldrich Act was passed. Some duties were lowered but some higher retaliatory duties were levied.

The Democrats came back to power in 1913. The Underwood Tariff Act, 1913 reduced duties further, but the policy of protection was not abandoned.

The U.S.A. participated in the World War from 1916 to 1918. The sharp collapse after the war resulted in the failure of the Underwood Tariff. Even a high tariff would not have coped up with the revenue demands of a modern war. But in 1918, the Underwood Tariff Act failed to bring even 5% of the taxes collected during that year.

The Republicans won the elections in 1920. Before leaving the White House President Wilson had vetoed a tariff bill which provided a protective system of agriculture. The Republicans had now to pass quickly the Emergency Tariff Act of 1921, which was to last only for six months. It provided for high duties on wheat, corn, meat, wool and sugar.

In September 1922, the Fordney-McCumber Tariff Act was passed. This Act marks the return of the U.S.A. to a system of protection, which was interrupted by the Underwood Tariff. This Act provided high import duties on agricultural products like flaxseed, lemons, sugar, wheat, wool, butter and milk. Chemical, metallurgical and other industries, which feared post-war competition, were given higher protection. The Act empowered the President to revise rates up or down by as much as 50 per cent whenever it was found that the existing duty failed to equalize the difference in U.S. and foreign costs of the important competing countries. It must, however, be noted that no serious use of this authority was made by Presidents Harding, Coolidge and Hoover.

The Republicans had promised in 1928 a revision of the tariff in the light of changes in the world competitive situation. But the tariff that emerged as a result, *viz.*, the Hawley-Smoot Tariff of 1930 was an extremely high one. This Act was a huge document of nearly 283 pages as compared with the Act of 1816 which was contained in only 4½ pages. It is impossible to summarise the complicated detailed structure of this Act. It should suffice to note here that it was a very high tariff measure and in its long legislative history of over one year it drew protests from several foreign governments, traders at home, as well as from 1028 American economists, who made a petition to President Hoover asking him to veto the Hawley-Smoot Bill.

In closing their petition, the American economists urged the Government "to consider the bitterness which a policy of higher tariffs would inevitably inject into our international relations. The United States was ably represented at the World Economic Conference which was held under the auspices of the League of Nations in 1927. This conference adopted a resolution announcing that "the time has come to put an end to the increase in tariffs and to move in the opposite direction."

"The higher duties proposed in our pending legislation violate the spirit of this agreement and plainly invite other nations to compete with us in raising further barriers to trade. A tariff wall does not furnish good soil for the growth of world peace."

The signatories of this communication were led by Professor Paul Douglas, Irving Fisher, Frank Graham, E.M. Patterson, Henry R. Seager, Frank W. Taussig and Clair Wilcox.

The passage of this Bill resulted in widespread retaliation and discrimination against American exports. It also had serious repercussions on the commercial policies of the principal trading nations of the world as also on the development of the principles of commercial policy throughout the world. It also undermined the principles upon which American tariff and commercial treaty-making were based.

The 1932-33 report of the World Economic Survey of the League of Nations, writes, "The Hawley-Smoot tariff in the United States was the signal for an outburst of tariff-making activity in other countries, partly at least by way of reprisals. Extensive increases in duties were made almost immediately by Canada, Cuba, Mexico, France, Italy, Spain. During 1931, general tariff increases were announced by India, Peru, Argentina, Brazil, China, Italy, Lithuania."

The Reciprocal Trade Agreements Act of 1934: In the early thirties the Democrats were victorious. Instead of enacting a new legislation, the Hawley-Smoot Act was amended. This amendment empowered the President to negotiate Reciprocal Trade Agreements on the basis of the high rates of the Hawley-Smoot Act. This amendment was to be in force for three years. In 1937, it was renewed for a further period of three years, and since 1940 its life is similarly extended from time to time. It was last renewed in August 1953 for one year. The Report of the Randall Commission issued in January 1954 recommended its extension, with certain changes, for at least three years. The Act expired on 12th June, 1954 and on 1st July, President Eisenhower signed the Bill, which then became law, providing for one year's extension of the U.S. Reciprocal Trade Agreements Act.

Under this Reciprocal Trade Agreements Amendment, agreements were made with 28 countries between 1934 and 1946, which included the following :—

Cuba,
Belgium,
Haiti,

Sweden,
Brazil,
Canada,
Kingdom of the Netherlands (Netherlands in Europe, Netherlands Indies, Surinam and Curacao),
Switzerland,
Honduras,
Colombia,
Guatemala,
France, its colonies, dependencies and protectorates other than Morocco,
Nicaragua,
Finland,
El Salvador,
Costa Rica,
Czechoslovakia,
Ecuador,
U.K. including Newfoundland and British Colonial Empire,
Canada (revised agreement),
Turkey,
Venezuela,
Cuba (supplementary agreement),
Canada (supplementary agreement),
Argentina,
Cuba (supplementary agreement),
Peru
Uruguay,
Mexico,
Iran,
Iceland and
Paraguay.

In November 1946, negotations for Reciprocal Trade Agreements were initiated with the following 18 countries and the areas for which these countries had the authority to negotiate.

Australia,
Belgium,
Brazil,
Canada,
Chile,
China,
Cuba,
Czechoslovakia,
France,
India,
Lebanon (Syro-Lebanese Customs Union),
Luxembourg,
Netherlands,
New Zealand,
Norway,
Union of South Africa,
U.S.S.R.,
U.K.

While announcing these negotiations, President Truman said, "It is important that the people of the United States realize the true significance of these negotiations, for us and for the world. They are not solely trade bargains. They are that, but they are much more. They are central to the structure of international economic co-operation under the United Nations. They are necessary to achieve the objectives of the Atlantic Charter and of Article VII of our mutual-aid agreements. They are necessary to strengthen and support the foundations of the International Monetary Fund and the International Bank for Reconstruction and Development and to pave the way for the kind of economic world envisaged in the suggested Charter for an International Trade Organization."

After the conclusion of the second World War, the U.S.A. put the trade agreements programme in high gear. She attempted to reach reciprocal multilateral trade agreements among several governments at the same time. In 1947, 23 governments sent their official delegations to Geneva for the purposes of firstly, drafting a Trade Charter (which later became the Charter of the International Trade Organization) and secondly, to work out reciprocal trade agreements among themselves. As a result of these negotiations, 123 separate trade agreements were signed, each of which embodied the unconditional Most Favoured Nation clause. Of these 22 were signed by the U.S. Government.

Two years later another successful attempt at tariff cuts was made at Annecy (France) in which 10 additional nations joined to negotiate agreements with the original 23 countries. To the Geneva and Annecy negotiations were appended general rules to provide a framework for administering mutual trade agreements and settling disputes which may arise in connection with the new tariff rates. These rules are designated as General Agreement on Tariffs and Trade (GATT). The GATT negotiations have resulted in a considerable lowering on the average of the U.S. tariff rates. Some rates have been reduced to lowest levels in many decades, although the U.S.A. is still basically a high tariff country.

## DOLLAR SHORTAGE

The dollar shortage of the world has been the most important subject of discussion in international economics since the end of the second World War. The phenomenon of a currency shortage is a highly technical one. We may put it in a simple manner by saying that a currency shortage occurs when a big country is continuously exporting much more than she is importing, and this gap, which is created, is larger than the size of the long-term investment of that country. In such a situation, we can say, that a shortage of the currency of that country is experienced by the rest of the world.

The dollar shortage is such a phenomenon and its trade counterpart is to be found in the tremendous merchandise export surplus of the U.S.A. Suppose the U.S.

exports of goods and services amount to $ 12 billion in a year, and the imports to $ 7 billion. Suppose her long-term foreign investments amount to $ 3 billion. Then the dollar shortage is $ 2 billion.

The dollar shortage is not a new problem. It has been in existence since the thirties but has assumed large proportions since World War II. The following table will show the extent of the dollar-gap, and how it was closed.

THE DOLLAR GAP (in billions of dollars)

| *Period* | *Dollar Gap* | *Principal ways of closing the dollar Gap* |
|---|---|---|
| 1920-24 | 1.8 | Private U.S. investment abroad; gold imports. |
| 1925-29 | 1.1 | Private U.S. investment abroad. |
| 1930-34 | 0.6 | Gold imports; short term U.S. loans. |
| 1935-39 | 0.6 | Gold imports. |
| 1940 | 1.7 | Gold imports. |
| 1941 | 2.4 | Gold imports; Lend-lease. |
| 1942 | 6.4 | Lend-lease. |
| 1943 | 11.0 | Lend-lease. |
| 1944 | 12.5 | Lend-lease. |
| 1945 | 6.0 | Lend-lease; Army Civilian Supply; UNRRA. |
| 1946 | 7.8 | UNRRA; Lend-lease; British Loan; sale of foreign assets; Army Civilian Supply; Export-Import Bank. |
| 1947 | 11.3 | British Loan; Army Civilian Supply; Gold Imports; sale of foreign assets. |
| 1948 | 6.3 | European Recovery Programme; Army Civilian Supply; Gold Imports. |
| 1949 | 7.0 | European Recovery Programme; Army Civilian Supply. |

Source : International Economics, Enke & Salera, p. 69.

Nations experiencing a shortage of dollars will either have to draw upon their foreign exchange reserves including gold, or the U.S. would have to make free gifts to them. It is likely that the reserves may soon come to an end and so also the U.S. gifts. In this case, these nations would buy less from the U.S.A. in comparison to their sales and/or sell more to the U.S.A. in relation to their purchases.

## U. S. FOREIGN AID

The U.S.A. is pouring aid on a huge scale into different nations of the world. There is no gainsaying that most of this has a political colour. The U.S. foreign aid programmes are either (i) the military assistance programme, or (ii) the economic and technical assistance programme. These aids are supervised by the Foreign Operations Administration (FOA). This U.S. Government agency was set up on 31st July 1953 to take over the functions of the Mutual Security Agency. The military assistance programme, however, is carried out by the U.S. Defence Department.

## MILITARY ASISTANCE

This comprises today by far the largest part of U.S. foreign aid. Its purposes are (*a*) to help create fighting forces in friendly countries strong enough to discourage armed aggression, or to meet such aggression effectively if it shoud occur; (*b*) to assist free nations in increasing their own capabilities for defence; (*c*) to safeguard the strategic resources of the free world.

The countries receiving aid under this programme are :

*Europe* : Belgium, Denmark, France, Greece, Luxembourg, the Netherlands, Norway, Portugal, Spain, the U.K., Yugoslavia.

*Near East* : Ethiopia, Persia and Turkey.

*Far Fast* : Formosa, Indo-China, Korea, the Philippine Republic and Thailand.

*Latin America* : Brazil, Chile, Colombia, Cuba, Dominican Republic, Ecuador, Peru and Uruguay.

Recently, the U.S. has accepted a Pakistan request for military aid and has also concluded an agreement with Japan.

### ECONOMIC AND TECHNICAL PROGRAMMES

Under these the U.S.A. finances purchases and shipments of vitally needed commodities, machinery and other items, and these may include war materials. The European Programme and the Far Eastern Programme come under this heading.

### THE TECHNICAL CO-OPERATION PROGRAMMES

Under these programmes technical assistance is provided by sending U.S. experts to certain countries, by receiving foreign experts in the United States for study and observation in their particular line of activity, and by arranging for basic surveys and research projects.

### IMPORTANCE OF IMPORTS

In spite of various kinds of aids and various other forms of foreign investment by the U.S.A. other nations are still short of U.S. dollars. They have been buying heavily from the U.S.A. in relation to their sales to that country. They are thus experiencing deficits in their balances of payments. The various methods of correcting these deficits, which have been suggested and also employed, related to such courses of action as exchange depreciation, exchange rationing, deflationary fiscal policy, a more restrictive import policy, liberalization of foreign commercial policy; or by altering the goals of the programme, when there is a deficit in the programme balance of payments. The positive steps which have been urged for dealing with temporary shortages of dollars are mainly exchange adjustments outside the U.S.A. and the facilitation of imports by the U.S.A.

We have seen earlier that the U.S.A. has always had high tariff barriers which have prevented expansion of imports by the U.S.A. on a scale comparable to the magnitude of her exports. In fact, the interest of the U.S.A. in international trade is always emphasised in terms of exports. There are thousands of export firms, groups and associations in the U.S.A. but there are relatively few organizations for promoting imports.

Any serious attempt at promotion of imports calls for discouraging legal and other barriers to imports in the form of restrictive tariffs and irksome and arbitrary customs regulations, etc. This also involves the suppression of the selfish interests of pressure groups in the U.S.A., who profit at the public expense by such barriers. At present only those imports are encouraged in America which are simply not produced at home. These include nickel and tungsten, tin, natural rubber, the platinum-irridum group of metals, chrome, quartz crystals, wood pulp, chicle, coffee, cacao. But there are numerous goods which the U.S.A. could better buy from abroad than fritter its own resources and artificially shelter certain home industries, though they are inefficient in comparison with similar industries elsewhere. This leads to the intensification of the uneven distribution of the resources of nations, and also prevents the countries with poorer resources and dense populations to sell goods to the U.S.A. While other countries can help themselves in obtaining dollars by modernizing their production, expanding output and having such exchange rates as do not hamper their exports, the U.S.A. on her part, must make every effort to facilitate imports and to maintain a high-level and stable international investment.

## FOREIGN ECONOMIC POLICY OF THE U.S.A.*

It will be appropriate to describe the present foreign economic policy of the U.S.A. at this stage. President Eisenhower gave a message to the U.S. Congress on 30th March 1954 outlining the action he proposed to take on the recommendations of the Randall Commission. His message outlined a minimum programme which, conceived as a whole, consists of four major parts. These four parts are according to him :

---

* International Survey, 8. 4. 54 C. O. I., London.

Aid—which we wish to curtail.
Investment—which we wish to encourage.
Convertibility—which we wish to facilitate; and
Trade—which we wish to expand.

The President said : "I consider it essential that we achieve each of these objectives which we must clearly understand, are closely interlocked; as we curtail our aid, we must help to close the dollar gap by expanding our foreign investment and trade. This expansion will be facilitated by a return to convertibility of foreign currencies. The return by our friends abroad to convertibility will be encouraged if our trade policy leads them to expect expansion of our foreign trade and investment.

"Unless we are prepared to adopt the policies I have recommended to expand export and import trade and increase the flow of our capital into foreign investment, our friends abroad may be discouraged in their efforts to re-establish a free market for their currencies. If we fail in our trade policy, we may fail in all. Our domestic employment, our standard of living, our security, and the solidarity of the free world, all are involved.

"For our own economic growth we must have continuously expanding world markets; for our security, we require that our Allies become economically strong. Expanding trade is the only adequate solution for these two pressing problems confronting our country."

*Trade.* As regards lowering unjustifiable barriers to mutual trade the President said, "The United States must take initiative and in doing so, make clear to the rest of the world that we expect them to follow our lead". The phrase "the dollar gap" had become the symbol of the free world's failure to find a lasting solution to the problem of balance in international payments. The United States should aim not at "filling" this gap by dollar grants, but at helping to "close" it by policies designed to facilitate a higher level of trade.

*Tariffs.* The President urged the adoption by Congress of the Randall Commission's recommendation that the President's power to negotiate tariff concessions under an amended Trade Agreements Act should be extended for three years. He had approved the Commission's recommendation that the United States should withhold reductions in tariffs on products made by workers receiving wages which were sub-standard in the exporting country, and that the United States should work to raise labour standards through international co-operation. He would act promptly on the recommendation that the organizational provisions of the General Agreement on Tariffs and Trade, should be re-negotiated so that the contracting parties would confine their functions to sponsoring multilateral trade negotiations, recommending broad trade policies and providing a forum for consultation on trade disputes.

*Customs Administration.* The President assured in his message that he would propose legislation providing for the simplification of commodity definitions and rate structure in the tariff law.

*Buy-American Legislation.* Following, the commission's recommendation, President Eisenhower asked for legislative authority to exempt from the provisions of 'Buy-American Legislation' the bidders from countries which treated U.S. bidders on an equal basis with their own nationals.

*East-West Trade.* "In viewing the problems of other nations of the free world we are forced to recognize that the economies of some of them have been weakened by the disruption of the broad historic pattern of trade between East and West. Curtailment of our aid programmes will increase the pressure for resumption of such trade. A greater exchange of peaceful goods between East and West—that is, goods not covered by the Battle Act nor otherwise considered strategic—so far as it can be achieved without jeopardizing national security, and subject to our embargo on Communist China and North Korea, should not cause us undue concern. I shall, of course, take appropriate action to ensure that our security is fully safeguarded."

*Raw Materials and Agriculture.* The President endorsed the Commission's recommendations on raw material policy and on the need 'to harmonize our agricultural and foreign policies.'

*Investment.* As regards American investment, the President's message said, "an increased flow of United States investment abroad could contribute significantly to the needed expansion of international trade. It also could help maintain a high level of economic activity and employment in the United States. Further, such investment contributes to the development abroad of primary resources needed to meet our own ever-increasing needs even while it helps to strengthen the economies of foreign countries.

In line with the commission's recommendations on means of encouraging U.S. Foreign investment :

(1) Full U.S. Diplomatic support would be given to the understanding and acceptance by other countries of the prerequisites for the attraction of foreign investment;

(2) Congress should consider extending the existing guarantee against losses on new investment abroad to cover losses caused by war, revolution and insurrection;

(3) The Department of Justice had been asked to consider the question of restating U.S. anti-trust laws in a manner that would clearly acknowledge the right of each country to regulate trade within its own borders.

*Economic and Technical Assistance.* Declaring the acceptance of the Commission's recommendations on foreign aid, the President said, "I subscribe to the principle that economic aid on a grant basis should be terminated as soon as possible consistent with our national interest. In cases where support is needed to establish and equip military forces of other governments in the interests of our mutual defence, and where this is beyond the economic capacity of another country, our aid should be in the form of grants. As recognized by the Commission there may be some cases in which modest amounts of grant aid to under-developed countries will importantly serve the interest of security. I further agree that in other situations where the interest of the United States requires that dollars not otherwise available to a country should be provided, such support to the maximum extent appropriate should be in the form of loans rather than grants."

President Eisenhower also accepted the Commission's recommendations that the U.S.A. should continue to participate in technical co-operation programmes. "Such programmes should concentrate on providing experts and know-how rather than large funds or shipmets of goods except for necessary demonstration equipment. They should not provide capital for investment but should be so administered as to fit into the programmes of development of the assisted countries and they should be related to any private or public investment likely to be forthcoming."

*Convertibility.* The President endorsed the Commission's view that progress towards convertibility was an indispensable condition for a freer and healthier international trade. "I have approved the Commissions recommendations for co-operation in strengthening the gold and dollar reserves of countries which have prepared themselves for convertibility by sound internal and external policies. These recommendations do not call for new action by the Congress. Authority and procedures for this purpose already exist. The United States will support the use of the resources of the International Monetary Fund as a bulwark to strengthen the currencies of countries which undertake convertibility. In addition, a study is now being made, as suggested by the Commission, of the possibility of stand-by credits from the Federal Reserve System."

# FOREIGN TRADE OF THE UNITED KINGDOM

The total value of British foreign trade in 1791 was only £36,000,000. It increased to £682,000,000 in 1873 and to £1403,500,000 on the eve of the first World War. In 1929, the total foreign trade, including imports and exports was approximately £2000,000,000. At this time this figure was larger than that of any other country in the world.

As far as industrial resources are concerned, England had adequate raw materials needed for manufacture in the early years of her industrial growth. With increasing industrialization, however, this condition was no more obtainable; and by and by England became more and more dependent on other countries for raw materials and for external markets for the huge quantities of goods produced by her factories. By the time the World Depression set in, England was self-sufficient only in coal. She almost ran out of her resources of iron ore, lead, zinc, other rarer base metals which are so very essential to the existence of her many industries. She fell short of the textile fibres also. She always had to depend on imported cotton for her world-famous cotton textile industry. At this time, the domestic supply of wool provided hardly one-third of her manufacturing needs. It is only the course of her industrial growth and the fact of her being the pioneer of the industrial revolution which can explain the phenomenon of the United Kingdom's commercial supremacy, in spite of her inadequate resources, including the availability of foodstuffs produced at home. As the first inventions were developed in England, she enjoyed a marked advantage over other countries and in a brief span of time, her economic organization adapted itself to the changing times gathering both industrial and commercial momentum.

The colonial possessions of England have had an important part to play in her foreign trade. She adopted a free trade policy from the middle of the nineteenth century and rigidly adhered to it till the outbreak of the first World War, when various protective measures were adopted on a small scale. According to the doctrines of mercantilism, colonies performed two functions, *viz.*, they provided a market for goods which the mother country could not consume, and secondly, they supplied raw materials for the manufactures of the mother country. Many of the overseas possessions of England became in due course self-governing dominions and largely determined their own domestic and foreign commercial policy. In spite of this, however, Great Britain obtained an enormous advantage in world commerce through her extensive trade with her dominions and other overseas possessions. Although her attitude to other countries was one of free trade, in practice, the Empire countries provided Great Britain with such trade concessions that in course of time an effective imperial preference area grew up, with immense advantages to the home country.

The large-scale British investments have also been responsible for the trade preferences accorded to Great Britain by her overseas possessions. As we have seen in Vol. I, British investments were made in these territories for building railways, improving and constructing ports and harbours, establishing banks, etc., developing plantations and other industries. This increase in the economic enterprise has been a potential factor in making possible a larger scale consumption of both domestic and empire goods. The interest on the investments and the principal are often returned to the home country in the shape of commodities. Thus, investments have helped the promotion of trade, irrespective of the tariff policies either of the empire countries or of Great Britain.

Through course of centuries the Empire grew into a sort of a league of free nations. But although various divisions of the Empire enjoy trading relations with other parts of the world, the U.K. herself, has a large share in the trade of the empire countries. Despite the growing competition from newly industrialized countries like the U.S.A., Japan and Germany, which have made inroads in the trade of these countries, the United Kingdom still enjoys the flow of trade in its customary channels.

In 1932, the U.K.'s total exports, including re-exports amounted to £300 million of which exports to the value of £86 million were made to the dominion and empire countries. Similarly, she imported goods worth £140 million from these countries out of a total value of imports of £507 million in the same year. From her trade with India for over 300 years, the U.K. has made immense gains. In 1913, India took 13.4 per cent of the total British exports, in 1928, 11.6 per cent; and in 1932, 10.5 per cent. Up to the beginning of the second World War, Britain used to take for consumption or re-export almost everything which the dominions could offer. Her great industrial and commercial organization enabled her to achieve this. On the other hand, the dominions import from the U.K. all sorts of manufactured goods of which cotton textiles, machinery, and iron and steel, are the most important. The important imports from India include tea, raw cotton, crude rubber, raw and manufactured jute, wool and leather. Canada exports to the U.K. wheat, flour, furs and skins, copper and lead, wood and timber products, cheese, ham and bacon. Australian exports to the U.K. are mainly raw wool, butter, wheat, frozen lamb, frozen beef, and pig and sheet lead. The exports from the Union of South Africa include various mineral products, wool, maize, hides and skins. British Malaya sends to the U.K. rubber, tin, and spices. From her possessions in Asia and Oceania, the U.K. obtains sugar, sheep and lamb skins, dried dates, coconuts, tea, rubber and tobacco. She obtains raw cocoa, mahogany, cotton, tin ore, palm and palm kernel oil, asbestos, tobacco, coffee, copper and spices from her other possessions in Africa. Some of these products are consumed in the U.K., while others are re-exported.

British shipping has played an important role in the promotion of British foreign trade. While shipping makes available a means of transport for carrying commerce, it forms an important source of income to the owners of the shipping and also assists in building up for the country a favourable balance of invisible credits. This income has had a special significance since the beginning of the present century due to the growing volume of ocean shipping and the efforts of the U.K. to maintain her share in the face of competition from other nations.

The U.K.'s income from shipping service has been as follows :

| | | | |
|---|---|---|---|
| 1907 | £ | 85 | million |
| 1927 | ,, | 140 | ,, |
| 1928 | ,, | 130 | ,, |
| 1938 | ,, | 100 | ,, |
| 1949 | ,, | 282 | ,, |
| 1950 | ,, | 333 | ,, |
| 1951 | ,, | 443 | ,, |
| 1952 | ,, | 436 | ,, |

The shipbuilding industry of the United Kingdom has throughout centuries helped to promote British international trade. In 1929 nearly 50 per cent of the world's shipping tonnage was constructed by the U.K.

It is a necessary condition of British foreign trade that the economic organization of the country must be so managed as to maintain a flow of raw materials and foodstuffs from abroad in order to provide external markets for her manufactures and also to encourage expansion of credits abroad. Since 1850, that is, after the abolition of the Corn Laws, grains have been flowing into the U.K. from the U.S.A., Canada, Argentina, Australia, as well as from the countries of Europe. The British farmer has had always to compete with the exporters of these countries much to his own disadvantage. But it must be noted that with a very limited acreage under food-crops, the U.K. could not support her large population on the food produced at home. The result of this state of affairs is that the U.K. has to get flour, meat products, butter and cheese through foreign trade. The chief sources of wheat are Canada, the United States, Australia and Argentina. Beef comes from Argentina, Australia, Uruguay and New Zealand. The U.K. gets mutton from New Zealand, Argentina and Australia. She imports bacon from Denmark, Netherlands, the U.S.A., and the Irish Free State. Hams and lard come mainly from the U.S.A. The U.K. is also a very large market for fresh and condensed milk and fresh fruit. While fresh milk and cream are brought from the Irish Free State, butter comes from Denmark, New Zealand, Argentina, Australia, Russia, Finland and Netherlands. The U.S.A. supplies the U.K. with fresh fruits such as apples, pears, oranges and grape fruit. Certain Mediterranean countries also export oranges and lemons. Apples, pears and grapes come to the U.K. from Australia and New Zealand. Tropical fruits like bananas, pine-apples, etc., come from Central America and the West Indies.

When we consider mineral products, the U.K. has an impressive array of them. The list includes coal, iron ore, tin, copper, lead, zinc and several non-metals. Most of these, however, are inadequate for her requirements and the U.K. has to rely on imports.

## COMMERCIAL POLICY OF THE U.K.

In spite of a tariff reform movement which started in 1903, Great Britain remained a free trade country. This movement sought a return to protective tariffs and a system of imperial preference. At the time of the first World War the need to augment revenue brought in new duties. In

1915, the McKenna duties (so called after the then Chancellor of the Exchequer, Reginald McKenna) were levied at the rate of 33⅓ per cent *ad valorem* on motor cars, motor-cycles, automobile accessories except tyres, musical instruments, clocks and watches. Imports of foreign films were subject to specific duties. The McKenna duties were meant to maintain and conserve foreign exchange but they nevertheless remained even after the war, till 1924, when the first Labour Government allowed them to lapse. When that Government fell, they were restored and by 1927 the McKenna duties were applied to commercial vehicles and tyres also. In 1916 an import tax was imposed on gasoline. The principle of British Empire preference was introduced in 1919 by which the McKenna duties were made only one-third in respect of goods from the empire.

The Dyestuffs Importation Act of 1921 prohibited the imports of all synthetic dyestuffs and intermediate products without a licence. This law was made permanent in 1934, when the list also was enlarged. In 1921 anotherl aw called the Safeguarding of Industries Act was passed. This did not apply to empire goods. It listed certain key industries for a 33⅓ per cent protection against foreign goods. These industries were the coal, iron and steel, engineering, shipbuilding, electrical trades, textile and chemical industries. Although it was meant to run originally for five years it was renewed from time to time. The Reparations Recovery Act of 1921 was passed with the intention of checking the invasion of German goods, with tariff rates as high as 50 per cent *ad valorem*.

With the depreciation of currencies in certain countries, the U.K. passed a law in 1922 assessing customs duties at 33⅓ per cent on goods originating in countries where currency depreciation had occurred.

The general elections of 1923 put the first Labour Government in power, who allowed the McKenna duties and the duties of the Safeguarding of Industries Act to lapse.

The same were brought back by the subsequent Government. The MacDonald Government (the Second Labour Government of the U.K.) tried in 1929 to remove many duties but they could not go far on account of the needs of the budget.

The parliamentary elections of 1931 made it clear that the country had given a mandate to the new Government to take all necessary measures to improve the deteriorating economic conditions of the country. Smelling the coming of customs duties British traders and manufacturers placed unusually large orders abroad. However, the Parliament was on the alert and the designs of these importers were defeated by rushing through a legislative measure in only three days. This law was rightly called the "Abnormal Importations Act." It was an Act to make provision for the imposition of customs duties on articles wholly or mainly manufactured, which were being imported into the U.K. in abnormal quantities and for purposes connected therewith. The Act authorised the Board of Trade on investigation to recommend to the Parliament duties up to 100 per cent *ad valorem* on such articles. As soon as the bill became an Act the Board of Trade announced a duty of 50 per cent on 23 classes of imports.

Following this Act, the Horticultural Products Act was passed in December 1931. High duties were levied by this Act on fresh fruits and vegetables, flowers, bulbs and plants. Free entry was allowed to empire products and some seasonal free trade was allowed to all countries. Although this Act was intended to be a temporary measure, it was later incorporated in the Import Duties Act.

The Import Duties Act of 1932 was put into force from 1st March 1932. This Act brought under a single tariff system several previous tariff laws. A general *ad valorem* duty of 10 per cent was imposed on all goods imported into the U.K. Goods already subject to tariff, empire goods and articles specifically exempted were made an exception. Such specially exempted articles included wheat, corn, meat, live-stock, tea, raw cotton, flax, hemp, cottonseed, rapeseed, linseed, soyabeans, wool and animal hair, hides and skins, newsprint, raw rubber, copper, sulphur, cinchona bark, coal, coke, unset precious stones, and cork. The Act also provided for the appointment of the Import Duty Advisory Committee for recommending changes in the rates of duty and for that purpose to conduct hearings. The Act also authorized the Board of Trade to increase rates up to 100 per cent *ad valorem* in order to counter discrimination against British goods.

Within eight months of the enforcement of the Act 18 countries asked th U.K. for tariff negotiations. These countries were Argentina, Belgium, Columbia, Costa Rica, Denmark, Estonia, Finland, France, Germany, Ireland, Lithuania, the Netherlands, Norway, Peru, Santo Domingo, Sweden, Switzerland and Uruguay. However, the U.K. Government decided not to enter into any agreements till the Ottawa Conference had taken place.

## THE OTTAWA CONFERENCE

In July and August 1932 the Ottawa Conference was held. At this Conference the British Government undertook (*i*) to levy duties on foreign imports of wheat, corn, copper and linseed; (*ii*) to increase the existing duties on foreign imports of a range of goods, mostly foodstuffs, all of which were to continue free when imported from empire countries; (*iii*) to control by quotas the importation of meats and dairy products in the interests of the dominion producers, (*iv*) to continue duty free the admission from the dominions of certain products made dutiable from foreign sources under the Import Duties Act of 1932; and (*v*) to refrain from reducing certain specified margins of preference.

At this Conference, the U.K. made agreements with Australia, Canada, India, Newfoundland, New Zealand, South Africa and Southern Rhodesia. The U.K. also extended duty free entry to goods from British Colonies, mandates and protectorates.

Following the Ottawa Agreements the trade of the U.K. with the empire countries increased. British imports from the empire countries amounted to 29 per cent in 1930. This percentage rose to 35 in 1932, to 38 in 1935, and to 40 in 1938. Similarly, British exports to the empire countries rose from 43.5 per cent in 1930 to 48 per cent in 1935, and to 50 per cent in 1938.

## TRADE AGREEMENTS

After the Ottawa Conference the British Government nogotiated trade treaties and agreements with several countries. In 1933 and 1934 bilateral trade agreements were entered into by the U.K. with the Scandinavian countries. The U.K. hoped to expand her export market for coal and textiles by these agreements. An exchange allocation agreement was negotiated with Argentina. She made agreements with the Baltic countries regarding her agricultural exports. Holland and the U.K. entered into a bilateral agreement for reciprocal trade quotas. Agreements with Poland and France brought to an end a tariff war which was going on for some months with the U.K. Negotiations with Germany related to the payments owed by the Germans to British exporters, and with the U.S.S.R. for balancing payments with her. Further negotiations were made with British India in order that the latter should accord a greater measure of preference to British goods. The agreement with Irish Free State resulted in strengthening the position of British coal in the Irish market and of Irish cattle in the British market. The representatives of the U.K., the Netherlands, France, India and Siam signed in May 1934 in London an agreement to regulate the production and the export of rubber from the rubber-producing countries, in order to reduce world stocks of rubber and to maintain the price level. Britain also entered into a similar agreement with the tin-producing countries.

In 1935 the U.K. revised the tariffs of some 410 classes of goods, raising the rates in some cases while lowering them in others. This year also witnessed trade agreements with Ireland, India, Poland, Italy, Uruguay, and Turkey. Next year boom conditions were witnessed in the U.K. on account of public works programme and the beginning of armament. As home demands increased, priority had to be given to the home needs. Tariffs on several raw materials and semi-finished goods were substantially lowered. Early in 1938 the U.K. signed a treaty with the Irish Free State by which the tariff war, that had existed between them for over six years, came to an end; with the Irish goods enjoying in the British market, the same level of preference as was accorded to the empire goods. Eire on her part agreed to allow a free entry to British coal, while levying a duty of 3 sh. per ton on coal imported from other countries. In the same year the U.K. signed Reciprocal Trade Agreements with the U.S.A. for herself and on behalf of Newfoundland and the British Colonial Empire. A trade agreement was also signed with India, the details of which are given in the section on India in this chapter.

With the outbreak of War on 3rd September 1939, the United Kingdom had to take quick steps to control her foreign trade. This was much more emphasized by her peculiar geographical position and her dependence for food on other countries. Under the Import, Export and Customs Powers (Defence) Act, a comprehensive list of goods was prepared whose exports were prohibited, except under a licence. This list was revised from time to time in the light of the exigencies of the war. In December 1939, the Board of Trade appointed a Committee of officials to unify all commercial transactions within the scope of economic warfare. Although Britain severely restricted her exports, their importance was never undermined. Britain was ever aware of the need to keep the export markets alive. For this purpose, the Board of Trade appointed an Export Council. It was officially stated at the time of the organization of the Export Council that "the maintenance of Export Trade is so vital a factor in the war effort of the Allied Powers that no measure calculated to contribute to the end in view should be excluded from consideration......... It is essential that under war conditions exporters should receive directions, guidance and support from the Central Government to a degree never contemplated under peace conditions...... The Council places no limit to the expedients they would be prepared to consider."

By the first quarter of 1940, 26 export groups were organized with an eye on the wartime, as well as post-war needs. The Export Council helped in a number of ways the cause of promotion and maintenance of exports. The Council, however, did not countenance the proposal of direct Government subsidy to exporters, as a general principle of policy, on grounds of engendering disastrous foreign repercussions. The Council provided a large measure of protection against the risk of overseas customers defaulting on account of war conditions. The Exports Credits Guarantee Department increased its coverage against transfer risk. It also recognised political expediency and national interest in place of the erstwhile strictly commercial considerations. Early in 1940, the English Commercial Corporation was started, with a capital of £500,000 subscribed by the Treasury, to develop and carry on trade with the Balkans. However, it could not re-win the trade of these areas which was lost to Germany.

Soon after Britain entered the war, all imports were placed under import licences or exchange permits. At the same time a Food Ministry was created, and was made the sole importer and director of distribution of all foodstuffs. A long list running into hundreds of items was prepared. The importation of these items was entirely prohibited. The list of imports was revised periodically, by which rates were either enhanced or reduced. Articles like sugar, tobacco, spirits, wines and beer came in for higher rates at the periodical revisions. Certain imports like pig iron, aluminium, alloys and certain aluminim products were placed on the free list.

The Emergency Powers (Colonial Defence) Order-in-Council gave powers to all British Colonies to control their trade by licensing of imports and exports and foreign exchange. These powers were used by the colonies specially against their trade with non-sterling countries. The U.K. developed during the war closer trade co-operation with the colonies and the Empire.

By the second year of the war all imports except live quadrupeds were subject to an import licence. Duties ranging between 16⅔ per cent and 33⅓ per cent *ad valorem* were levied on luxury goods. From time to time changes in the membership of the sterling area were made. For 4½ years till August 20, 1945 the Anglo-U.S. trade relations were conducted on the basis Lend-Lease. With the change of Government in 1945, certain new chages were witnessed. Among these were the nationalization of the Bank of England, civil aviation, the coal mining industry, and cable wireless. The Labour Government re-introduced after the war, duties on certain machineries and accessories, which were on the free list during the war.

## BALANCE OF PAYMENTS

At the time of the negotiations for the Washington Loan (1945) it was estimated that Great Britain will have to resort to an "export drive", which would necessitate an increase of the order of 50 per cent over the pre-war level of exports, if the pre-war volume of imports into the U.K. was to be maintained. However, in practice an export drive to the tune of 75 per cent over the pre-war level was needed to combat the situation created by the second World War.

It will be interesting to have an idea of the British balance of payments position on the eve of the second World War.

The British Balance of Payments, 1938. (£ million).

| *Imports* | | *Means of Payments* | |
|---|---|---|---|
| Net imports of goods | 858 | Net export of British goods | 470 |
| Net Govt. expenditure overseas | 13 | Net shipping income. | 100 |
| | | Net income from overseas investments | 200 |
| | | Other net receipts (financial earnings, tourists, etc.) | 25 |
| | 871 | | 805 |
| | | Deficit | 66 |

These figures show that on the eve of the war, Britain's net deficit was £66 million a year. The year 1938, however, was not a normal year in the sense, that in that year imports were increased with a view to stock-piling of food and raw materials in the event of the war. If, therefore, we take an average of three years from 1936-1938, we find that the net annual deficit for the country was of the order of £40 million on the current balance of payments. This three years' deficit of £120 million was wiped off mostly by repatriation of British capital abroad.

*Effect of the War.* When we consider that Britain's over-seas investments totalled on the eve of the war £4000 million, an annual deficit of the order of £40 million (or even £66 million) was not at all alarming. But the war brought in its wake radical changes. By June 1945, Britain had sold £1,118 million of her overseas capital holdings. From £864 million in 1938, the gold and dollar reserves had fallen to £453 million; a large proportion of the latter figure was held in trust by the U.K. for the empire countries which had contributed during the war to the Empire Dollar Pool. Britain stood indebted to other countries to the tune of £3,555 million in the shape of sterling balances accumulated in London. She also found herself with 19.5 million deadweight tons of mercantile marine, which was estimated before the war at about 40 million deadweight tons. British exports fell from £470 million in 1938 to £257 million in 1944. At the same time her income from overseas investments had fallen to less than £100 million annually, not taking into account the interest payments from Britain to her creditors. The loans from the U.S.A. and Canada were negotiated with a view to ease the situation and to enable Great Britain to return to normalcy.

## EXTERNAL TRADE SINCE 1938

The table given below shows annual figures of imports and exports of the U.K.

UNITED KINGDOM Imports & Exports

| | 1938 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 |
|---|---|---|---|---|---|---|---|---|
| **Value** (£million) | | | | | | | | |
| Total imports c.i.f. | 919 | 1292 | 1792 | 2074 | 2275 | 2608 | 3904 | 3481 |
| Export of U.K. goods f.o.b. | 471 | 915 | 1139 | 1583 | 1786 | 2171 | 2580 | 2550 |
| Re-exports f.o.b. | 61 | 50 | 59 | 60 | 58 | 85 | 127 | 144 |
| **Volume Index Nos.** | | | | | | | | |
| Total imports | | | | | | | | |
| 1938=100 | 100 | 67 | 76 | | | | | |
| 1950=100 | | | 89 | 92 | 100 | 100 | 113 | 103 |
| Exports of U.K. goods | | | | | | | | |
| 1938=100 | 100 | 99 | 109 | | | | | |
| 1950=100 | | | 62 | 79 | 87 | 100 | 101 | 95 |

Source; Britain, an official handbook, C. O. I., London.

## U. K. DIRECTION OF TRADE

*Value of Total Imports*

| | 1938 | | 1947 | | 1952 | |
|---|---|---|---|---|---|---|
| | Value | | Value | | Value | |
| | £ million | % | £ million | % | £million | % |
| North America | 199.3 | 22 | 536.2 | 30 | 635.2 | 18 |
| of which : U.S.A. | 118.0 | 13 | 297.1 | 17 | 315.7 | 9 |
| Canada | 81.3 | 9 | 239.1 | 13 | 319.5 | 9 |
| Other American Account Countries | 15.7 | 2 | 67.6 | 4 | 86.3 | 2 |
| Other Western Hemisphere Countries | 61.6 | 7 | 175.7 | 10 | 99.1 | 3 |
| Sterling Area | 286.9 | 31 | 558.3 | 31 | 1,437.3 | 41 |
| Non-sterling OEEC Countries and Possessions | 220.3 | 23 | 307.8 | 17 | 856.8 | 25 |
| Eastern Europe | 74.3 | 8 | 49.1 | 3 | 165.8 | 5 |
| Rest of the World | 61.4 | 7 | 99.8 | 5 | 201.0 | 6 |
| TOTAL | 919.5 | 100 | 1794.5 | 100 | 3481.5 | 100 |

Source : Britain, an official handbook, C. O. I., London.

## U. K. DIRECTION OF TRADE

### *Value of Exports of U.K. Goods*

| | 1938 | | 1947 | | 1952 | |
|---|---|---|---|---|---|---|
| | Value | | Value | | Value | |
| | £ million | % | £ million | % | £ million | % |
| North America | 44.0 | 9 | 92.9 | 8 | 270.9 | 11 |
| of which U.S.A. | 20.5 | 4 | 48.0 | 4 | 143.5 | 6 |
| Canada | 23.5 | 5 | 44.9 | 4 | 127.4 | 5 |
| Other Western Hemisphere Countries | 29.5 | 6 | 62.4 | 5 | 97.8 | 4 |
| Sterling Area | 211.8 | 44 | 555.1 | 49 | 1252.5 | 49 |
| Non-Sterling OEEC Countries & Possessions | 118.3 | 26 | 265.7 | 23 | 644.5 | 25 |
| Eastern Europe | 27.9 | 6 | 44.5 | 4 | 61.4 | 2 |
| Other American Account Countries | 7.5 | 2 | 20.7 | 2 | 62.9 | 2 |
| Rest of the World | 32.4 | 7 | 97.6 | 9 | 159.5 | 7 |
| TOTAL | 471.4 | 100 | 1138.9 | 100 | 2549.6 | 100 |

Source : Britain, an official handbook, C. O. I., London.

### U.K. General Balance of Payments, 1949-52
(£ Million)

| **A. Current Account** | 1949 | 1950 | 1951 | 1952 |
|---|---|---|---|---|
| *Debits* | | | | |
| Imports f.o.b. | 1,978 | 2,378 | 3,496 | 2,927 |
| Shipping | 191 | 196 | 308 | 327 |
| Interest, profits & dividends | 106 | 121 | 183 | 216 |
| Travel | 75 | 85 | 104 | 82 |
| Migrants' funds, legacies, private gifts (net) | 21 | -4 | 5 | 7 |
| Government transactions | 174 | 163 | 187 | 212 |
| Total debits | 2,545 | 2,939 | 4,283 | 3,771 |
| *Credits* | | | | |
| Exports and re-exports (f.o.b.) | 1,841 | 2,252 | 2,749 | 2,825 |
| Shipping | 282 | 333 | 443 | 436 |
| Interest, profits and dividends | 200 | 265 | 300 | 284 |
| Travel | 42 | 61 | 75 | 80 |
| Government settlements, war disposals, etc. | 35 | 27 | 36 | 43 |
| Other (net) | 176 | 299 | 266 | 251 |
| Total credits | 2,576 | 3,237 | 3,869 | 3,919 |
| Balance of current transactions excluding defence aid—net (credit, + ; debit, -) | +31 | +298 | -414 | +148 |
| of which (a) visible trade | -137 | -126 | -747 | -102 |
| (b) invisible : | | | | |
| Government | -139 | -136 | -151 | -169 |
| Other | +307 | +560 | +484 | +419 |
| Total | +168 | +424 | +333 | +250 |
| Defence aid (grant less U.S. share of counterpart) | —— | —— | +4 | +121 |
| Balance of current transactions including defence aid net (credit, + ; debit, -) | +31 | +298 | -410 | +269 |

U. K. GENERAL BALANCE OF PAYMENTS (Table contd.)

| | 1949 | 1950 | 1951 | 1952 |
|---|---|---|---|---|
| **B. Investment and Financing Account** | | | | |
| Grants, etc. (to U.K., +) | +154 | +140 | +43 | ... |
| Other investment (-), borrowing (+) | -378 | -84 | -315 | - 95 |
| Sterling liabilities, etc. (increase, +) | +190 | +221 | +338 | -349 |
| Drawings on (+) or additions to (-) gold and dollar reserves | + 3 | -575 | +344 | +175 |
| Total of investment and financing | - 31 | -298 | +410 | -269 |
| of which, net change in capital account | -185 | -438 | +367 | -269 |

Source : Britain, an Official handbok, C. O. I., London

The tables on pages 207 and 208 show the trend of the direction of U.K.'s foreign trade. The war cost Britain something like one-quarter of her total national wealth. Britain met these difficulties by quickly reconverting her industry from a war-time to a peace-time basis. She diverted very rapidly a large proportion of her production from the home to the export market. The Britons did their best in tightening their belts and to reach a position of an overall favourable balance. The progress was achieved by increases in the volume of visible exports and re-exports which paid 91 per cent of imports in 1949 compared with 72 per cent in 1947, and 63-64 per cent in 1938.

Since the end of the war Great Britain has been fighting the battle of the balance of payments. This problem was characterised by the heavy losses of British investments abroad during war-time, new overseas indebtedness and the fast deteriorating terms of trade. After 1945, this problem hinged mainly on the question of effecting a dollar balance.

The pattern of U.K.'s import trade was bound to change as a result of the war. In spite of a strict system of controls the U.K. had to import on a very large scale certain essential goods from North America. The U.K. had to earn these dollars by exporting more and more to these countries. The problem of dollar balance was not independent. It was very closely connected with maintenance of a balance with the sterling area, because the gold and dollar reserves of the U.K. served also the needs of the sterling area countries. Before the war the U.K. used to have an adverse balance with North America, but a favourable balance, with the sterling area. Britain's adverse balance with North America was roughly offset by its positive balance with the sterling area; the latter area as a whole enjoying a favourable balance with North America.

During the war such a triangular balance of payment could not be effected. From 1945 to 1947 the U.K. made a living for herself possible only by maintaining an adequate level of imports, which were paid for by drawing heavily on reserves and contracting external loans. The Washington Loan of $ 3,750 million was granted in December 1945 and the Canadian Loan of $ 1,250 million in March 1946. The U.K. received economic support after 1948 from the European Recovery Programme (ERP). When this source of dollars came to an end she received economic support under the U.S. Mutual Defence Assistance and Mutual Aid Programmes. The Organization for European Economic Co-operation (OEEC) was set up in April 1948. This organization administers the dollar aid on the European side and encourages self-help and co-operation among European member countries. It was successful in forming the European Payments Union (E P U) in July 1950 and in taking various measures to liberalize trade. When in 1949 the U.S.A. experienced a slight recession, the U.K. had to draw heavily upon her gold and dollar reserves, which were threatened to exhaustion. Hence, on 18th September 1949 the U.K. devalued the pound sterling from $ 4.03 to $ 2.80.

This devaluation, together with industrial recovery in the U.S.A. and the outbreak of the Korean conflict improved the dollar position of the U.K. in 1950. This improvement, however, could not be maintained, as it was followed in the next year by a serious drain on Britain's gold and dollar resreves. This crisis was brought by a steep fall in the raw material prices in the sterling area and also on account of the increase in imports by the sterling area countries from the non-sterling area countries. In the latter half of 1951, therefore, the U.K. suffered a loss of £550 million, from her gold and dollar reserves. The year 1952 saw a preoccupation, on the part of the U.K. and the sterling area, with meeting this crisis. The Bank Rate was put up and measures were taken to limit imports. At the meeting of the Commonwealth Finance Ministers held in January 1952, it was agreed that the sterling area should be brought into balance with the rest of the world; that the drain on gold and dollar reserves should be stopped and that inflation should be eliminated. These aims were to be achieved by the second half of 1952. The U. K. had agreed at that meeting to achieve a balance on current account with the non-sterling world and with the rest of the world. These immediate aims were achieved; thanks, however, to the U.S. defence aid, receipts of which totalled £120 million in 1952. This aid enabled the U.K. to strengthen her reserves. The gold and dollar reserves, which stood at £594 million in April 1952 had risen to £813 million by April 1953.

## FINANCE AND REGULATION OF TRADE

Even today essential foodstuffs and raw materials are imported by Government purchase. This, however, is done on a much restricted scale. Private trade is subject to exchange control and export and import control which operated during and since the war. These systems of controls apply differently to trade within and outside the sterling area.

Exchange control was instituted in the U.K. from September 1939 under the Defence (Finance) Regulations. These were superseded later by the Exchange Control Act, 1947. This Act placed on permanent basis, with minor modifications, the system of controls built up during the war. The powers under the Act are vested in the Treasury, which is responsible for the exchange control policy. The Bank of England, in practice, acts as the agent of the Treasury in this behalf. The Bank of England, in its turn, has delegated some of its powers to the commercial banks.

As a financial control, a system of exchange control aims at conserving and allocating exchange resources, controlling capital movements, and ensuring that the foreign investment of the country flows into desirable channels. Exchange control is administered by gathering all foreign exchange earnings. A control is instituted on the use of foreign currency, for whatever purpose it is used, *e. g.*, for paying for the imports, for commercial payments or foreign investment. Exchange control is by its very nature a discrimination device. Exchange control is either relaxed or tightened from time to time, depending on the state of the balance of payments.

The British foreign exchange control is operated by arranging non-sterling area countries in groups, *e.g.,* American Account countries, Canada, Transferable Account countries, unclassified countries. Sterling payments between and within these are controlled in varying degrees. Although residents outside the U.K. are not subject to the Exchange Control Act, each sterling area country has a system of exchange control which works on lines similar to that in the U.K. The U.K. thus still enjoys the position of a banker to these countries among which sterling flows freely.

The import and export controls are administered under the Import, Export and Customs Powers (Defence) Act, 1939. This Act gives powers to the Board of Trade to make Orders prohibiting or regulating the import or export of goods. The most important Orders which are current are the Import of Goods (Control), Order, 1940, and the Export of Goods (Control), Order, 1953 (as amended). Imports are regulated by a number of licencing devices such as Open General Licences, Open Individual Licences, Individual Import Licences, etc.

## STATE TRADING

State trading is restricted to importation of certain foodstuffs and raw materials. Since the beginning of the war and the creation of the Food Ministry, certain foodstuffs which have been rationed, have been imported by the Food Ministry or by its agents. Recently, however, there has been a considerable relaxation of this system and private imports of certain foodstuffs, etc., are permitted.

Similarly certain essential raw materials for military and civil requirements were purchased by the Government from abroad. After the end of the war commodities like wool, rubber, all kinds of timber, hides and skins, true hemp, tin, aluminium, copper, lead, ferro-alloys, zinc, and magnesium have been freed for private importation. The Government is still the sole importer of jute and jute goods, flax, sulphur and pyrites, and tungsten.

## GOVERNMENT ASSISTANCE TO OVERSEA TRADE

The Government of the United Kingdom has an excellent service of information and advice to merchants and manufacturers. The Board of Trade, through the British Embassies, Legations or Trade Commissioners abroad, maintains all useful information, regarding local economic and commercial conditions. This information is brought up to date periodically. Information for any country on the following points is provided by the Board of Trade.

(1) Prospects for U.K. exports and requirements of particular markets;

(2) imports restrictions and tariffs and duties on particular commodities;

(3) methods of trading;

(4) goods most likely to sell;

(5) local tastes and preferences in design;

(6) probity and influence of firms with which an exporter contemplates entering business relations.

*The British Industries Fair.* The Board of Trade sponsors the British Industries Fair, which is the largest national trade fair held regularly in any country. The first BIF was held in 1915. It has been held since then annually except in 1925 and from 1940 to 1947. Since 1947, the Governments of the Commonwealth countries also participate in the Fair by organizing representative displays.

*The Export Credits Guarantee Department.* This is a department of the Board of Trade and is run on commercial lines. It offers facilities to U.K. exporters and merchants enabling them to insure the risks of financial loss in oversea trading. These facilities have been offered by the Department for over 20 years and at present there are 4000 policy holders. The policies cover a wide range of risks, *e.g.* insolvency or prolonged default by the buyer; exchange restrictions which prevent transfer of sterling to the U. K.; war; civil war in buyer's country; etc., etc. The Department's policies are of three categories, *viz.*, (*i*) short-term policies, (*ii*) medium-term policies, and (*iii*) dollar-drive policies. The exporter or merchant is required to retain an interest in the debt or risk involved, and in consequence guarantees are extended up to a maximum of 90 per cent. Separate assessment of premium rates is made for each country. The rates vary according to the risks and terms of payment.

## FOREIGN TRADE OF JAPAN

## 1881–1913

The foreign trade of Japan became significant only after the late nineties. Thence its growth was faster and on the eve of the first World War, it could be considered substantial. Japan had on the average a favourable balance of trade every year during the period 1881 to 1893. After the war with China in 1894-95 she had to make heavy imports of capital goods, etc., and thereafter there was a large unfavourable balance. In 1894, raw silk, tea, copper and coal accounted for over 3/4 of the total exports of Japan. Imports consisted largely of semi-manufactured and manufactured goods. The exports of Japan at this time depended chiefly on her domestic raw materials and the products of her age-old small-scale industries.

With the growth of industrialization an important trade in cotton yarn was cultivated. Cotton piecegoods also began to be exported. By 1900 silk and cotton piecegoods constituted nearly one quarter of the total exports of Japan. This development was at the expense of raw silk, which used to be an important export item before. The exports of copper and coal continued their previous significance though the agricultural exports, tea and rice experienced a comparative decline. In the period from the beginning of this century to the outbreak of World War I there was a steep rise in exports. By 1914, raw silk, silk piecegoods, cotton yarn and cotton piecegoods constituted nearly 50 per cent of the total exports from Japan. Raw silk alone was responsible for 30 per cent of the total exports. Thus the foundation of Japan as a world exporter of textiles and textile materials was laid at this time, and for the next two decades Japan's foreign trade was dominated by these goods.

In the eighties the imports consisted mainly of finished goods and some industrial raw materials. On the eve of the first World War the imports of finished goods constituted only about 1/5 of the total; raw materials consisted of 1/3 and semi-manufactured goods about 1/6. It is important to note here that in spite of an increase in Japanese population the food and drink imports formed a smaller proportion than in the eighties. This is explained by the growth of food supplies at home by concerted action. In 1913, nearly one-third of the total imports were of raw cotton. Other important import items were textile materials like wool, iron and steel, machinery and tools. The imports of cotton yarn and textile piecegoods had, however, by now become insignificant.

## 1914–1929

On the eve of the war, Japan was having financial difficulties, which were accentuated by the war. However, she was now on the threshhold of a 'period of unexampled prosperity'. Several markets of the world and especially the Eastern markets were thrown open to Japan. There was a brisk demand for Japanese shipping and even munition supply orders were placed with Japan by Allied powers. Japan enjoyed an industrial boom which lasted till the spring of 1920. New industries were started and the old were enlarged. This excessive demand for her goods came when Japan was not able to import goods on a comparable scale, with the result that a large export surplus appeared. "Whereas, in 1911-14 the average annual excess of imports over exports amounted to 65 million yen, in 1915-18 the annual excess of exports averaged 352 million yen. In value the exports of 1918 were three times those of 1913; in volume it has been estimated that they were 40 per cent greater. At the same time, her invisible exports greatly expanded. In 1914 her steamship tonnage stood at 1½ million; in 1918 she had over 3 million tons. Japan's net income from freights rose from under 40 million yen in 1914 to over 450 million yen in 1918. Even in 1919, when there was a return to a small import surplus in her visible trade, the shipping boom continued. The result has been summed up by saying that Japan's net credits on international account from trade and services aggregated over 3,000 million yen between 1914 and 1919. This was 1,000 million yen more than her total foreign indebtedness in 1913 and about 1,700 million yen more than her net foreign indebtedness at that time."[1]

Between 1913 and 1929, the foreign trade of Japan increased by leaps and bounds. By 1929 it was thrice in value and over twice in volume as compared with 1913. This rise appears to be still greater if we include the trade between Japan and her colonies. This latter trade was not very important on the eve of the war. At the end of the first World War, it was estimated to be only 12 per cent of the total Japanese trade. By 1929 the colonial trade of Japan was about 1/5 of the total. Japanese goods enjoyed a free entry into these markets whereas foreign goods were subject to the same restrictions as were imposed on their entry in Japan proper. Japan exported mainly manufactured goods and also capital goods to the colonies in order to build up their resources. The colonial exports to Japan consisted mostly of foodstuffs and raw materials. From Korea, Japan imported chiefly rice. The Korean rice later on became an increasingly important source of Japanese supply. Korea also sent to Japan beans, marine products and fertilizers, while Formosa sent sugar and rice.

Between 1913 and 1929 Japan exhibited features of a country in the process of industrialization. Her exports of finished goods increased from 29 per cent in 1913 to 44 per cent of the total exports in 1929. Semi-finished goods accounted for the same proportion. These consisted chiefly of raw silk. We have noted earlier that various kinds of textiles dominated Japanese exports in 1913. The Japanese export trade became by 1929 even more specialized. In that year, cotton yarn and cloth, raw silk and silk together made up for 65 per cent of the total exports; raw silk alone accounting for 37 per cent. The export trade was specialized not only in respect of commodities but of markets as well. In 1913, China and the U.S.A. were the two biggest customers of Japan, and together they took 64 per cent of Japan's exports. In 1929, they took 67 per cent; but between them, however, the importance of the U.S.A. had increased at the expense of China. British India was the third biggest customer of Japan and took 9 per cent of the annual exports of Japan. British East Indies also had become a substantial customer of Japanese goods. While the U.S.A. bought chiefly Japanese raw silk, the Eastern Asian markets absorbed mainly Japanese cotton goods.

---

[1] A Short Economic History of Modern Japan, G. C. Allen, p. 91.

## Japanese Competition In World Markets

A few observations on the Japanese competition in the world markets will not be out of place here. Japanese competition is usually shown to be of a very serious and menacing character. What, however, is important is not the extent of this competition but nature of it. The following figures show the progress of Japanese foreign trade in world context, and it is clear that the quantitative progress of Japan's foreign trade, as a proportion of world trade, is a very moderate one.

### Japanese Foreign Trade in Relation to the World

*Imports*

|  | 1929 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 |
|---|---|---|---|---|---|---|---|
| % of World Total | 2.80 | 2.83 | 2.92 | 3.04 | 3.31 | 3.38 | 3.56 |
|  |  | *Exports* |  |  |  |  |  |
| % of World Total | 2.93 | 2.89 | 2.82 | 3.13 | 3.33 | 3.62 | 3.62 |

Source : Eastern Industrialization and its Effect on the West—G.E. Hubbard.

It is interesting to note that quite early in her industrial progress, Japan could get a hold on the markets of her Eastern neighbours. This was more or less the direct outcome of the first World War. Later on when these Eastern markets shrank for Japanese goods systematic attempts were made to expand her trade in other markets. For instance, when the Indian market was declining Japan tried expansion elsewhere. Similarly, when her position was properly established in India, Dutch East Indies and the British Crown Colonies, she transferred the pressure of trade expansion to South American countries whose markets were formerly ignored by her.

Detailed studies made in this connection show that quantitatively Japanese competition has been very small, especially with regard to those European countries, whose protests were the loudest. It is said that the dislocation and discomfort were caused by merely the threat and manner of Japanese competition, than by its actual incidence. Japan's competition, must be considered serious from the qualitative rather than the quantitative point of view. By production and marketing of cheaper goods, Japan was successful, at least in the primitive markets, to create a sense of new values regarding the goods they usually purchased. It is probable that these buyers may have withheld from buying dearer, though better quality goods. This probability was sufficient in most cases to scare the competitors of Japan, especially when they met in Eastern markets.

## 1929 ONWARDS

Resuming our account of the development of Japan's foreign trade, we find that in spite of an increase in the exports between 1932-37, the terms of trade moved strongly against Japan. But in the light of the fact that Japan's industrial efficiency was rising during this period, we can say that she did not have to devote a correspondingly larger amount of resources to pay for her imports.

The development of Japan's foreign trade from the end of the depression to the outbreak of war with China (1937) reflects clearly the general economic developments within the country. From 2,216 million yen in 1929, the value of imports into Japan fell to 1,236 million yen and 1,432 million yen in 1931 and 1932, respectively. Similarly, the value of total exports of Japan fell from 2,149 million yen in 1929 to 1,147 million yen and 1,410 million yen in 1931 and 1932 respectively. The recovery of foreign trade was quick after the fall of the yen. In 1937, the value of total imports had reached 3,783 million yen and that of total exports to 3,175 million yen.

It must be noted that this increase in Japan's foreign trade took place at a time when the world trade was stagnating. During this period the exports of raw materials and foodstuffs remained very small. In 1929, 44 per cent of the total exports consisted of finished goods. This proportion rose to 59 per cent in 1936. However, the proportion of semi-manufactured goods declined from 43 to 27 per cent between 1929 to 1936. Similarly, there was a fall in the proportion of raw silk exports to the total from 37 to 15 per cent. Japan exported in 1929, 1,791 million square yards of cotton piecegoods. This figure rose to 2,710 million square yards in 1936. The textile exports consisted of cotton yarn and piecegoods, rayon yarn and piecegoods, woollen and worsted piecegoods and knitted goods. Although there was an absolute increase in the volume of textile exports, it must be emphasized that the proportion of these exports to the total declined from nearly 70 per cent in 1929 to approximately 53 per cent in 1936. This decline was brought about by a corresponding rise in the proportion of metals, metal manufactures, machinery and instruments in the total exports. During this period several miscellaneous industries like toys, lamps, pottery, glass, etc., also registered a considerable expansion in the export of their products.

When we consider the direction of Japanese exports, we find that the same had undergone a change during

1932-1937. The importance of the U.S.A. in the export trade of Japan decreased. In 1929, the U.S.A. took 43 per cent of the Japanese exports; in 1936 she took only 22 per cent. This is explained by the fact of the decline in the exports of raw silk to the U.S.A. The U.S.A. used to be a very important buyer of Japanese raw silk. The fall in the U.S. purchases of raw silk had very serious repercussions in accentuating the depression which enveloped this industry from 1929 onwards. The share of China (including Kwantung, Manchuria and Hong Kong) increased from 25 per cent in 1929 to 27 per cent in 1936. It is true that the Japanese exports to China proper were falling. But this fall was compensated by the export of capital and finished goods to Manchuria and North China, where Japan had been investing heavily. This period also saw a rise in the export of Japanese goods to British India, Dutch East Indies and Strait Settlements, as also to Africa, South America, Europe and Australasia. Her exports consisted at this time, mainly of raw silk, canned fish, tea and pottery to the U.S.A. and textiles and other cheap consumption goods supplied to countries of Asia and the South Seas.

On the eve of the war with China, Japan's export trade was much less specialized than in 1929. This was due to various reasons such as restrictions placed on traditional exports to her former markets, to the depression in her raw silk trade; and to the diversification as a result of being compelled to find alternative markets for her goods, or new type of goods to new markets.

We have noted earlier that Japan's share in world trade was very moderate in the thirties. But there was a hue and cry in the world when Japan's exports began to increase. No doubt, the share of Japan in world export trade did rise from 2.93 per cent in 1929 to 3.62 per cent in 1936; and so also the absolute volume of Japan's exports, at a time when there was a general stagnation in world trade. But this rise must be considered insignificant and certainly the outcry of various countries was not justified. We must also emphasize that as the exports rose, the imports of Japan also rose. The share of Japan in the world's import trade rose from 2.80 per cent to 3.56 per cent in 1936. The outcry against Japan's commercial expansion is explained by the fact that in 1929 Japanese exports were not competitive to those of other leading industrialized countries. In this period, however, she was compelled to search for alternative commodities in place of her raw silk exports. These were replaced by finished manufactured goods, which, being cheap, very often offered severe competition to goods from the advanced countries. The competition of Japanese cheap cotton piecegoods with the textile goods of the U.K. is a case in point. The declining British cotton textile industry (due to loss of customers, especially India) was certainly affected by Japanese competition.

The changes in the composition of Japan's import trade clearly reflect the rapid industrialization of the country. By 1936, imports into Japan consisted of mostly raw materials, *e.g.*, those required in the textile industry and semi-manufactured products like pig iron and scrap, non-ferrous metals, and pulp. The importance of finished goods in Japan's imports declined, although she continued to buy from abroad certain kinds of machineries, automobiles and spare parts.

The direction of import trade also underwent a change. Japan's increasing demand for wool was now satisfied by Australia. The U.S.A. supplied her machinery, automobiles and raw cotton. She also imported from Africa and South America, with a view to balancing her payments with certain other countries. By 1936, the importance of the Japanese colonies grew both in Japan's export and import trade. The colonies were responsible for taking 18 per cent of her exports and supplying 20 per cent of her imports in 1929. In 1936, these percentages had risen to 25 per cent and 24 per cent, respectively.

Thus, Japan was successful in adjusting her foreign trade to the changing needs of the thirties. She had found new commodities and alternative markets for her goods. Her rapid industrial progress enabled Japan to become a significant market in the world for the cotton of the U.S.A. and the wool from Australasia. Her industrial progress can be gauged by the fact that she had by now become self-sufficient in most finished goods, including machinery and capital goods. But the world trend towards greater restrictions did have its effect on Japan's foreign trade. She had to curb the expansion of her exports to certain markets, even though expansion was possible. She concluded several bilateral trade agreements with a view to balancing her trade with certain countries. These trade treaties partly explain the deterioration of the terms of trade for Japan in the mid-thirties. These treaties further had certain political effects which were far from happy. In short, Japan's economy at this time resembled that of England in the middle of the nineteenth century, *i.e.,* a position in which a country depends on foreign trade to maintain and improve the standard of living of her growing population. But the world had changed. It was not the same as Britain had seen in the middle of the nineteenth century. International trade was already dwindling and different countries of the world were doing their best to increase their own share in the same. Under such circumstances, Japan's expansionist economic policy was bound to be looked upon with suspicion if not with open hostility.

## FOREIGN TRADE OF JAPAN PROPER

*(in million yen)*

| *Period* | *Imports* | *Exports* |
|---|---|---|
| 1899-1903 (annual average) | 270 | 244 |
| 1904-1908 „ | 442 | 377 |
| 1909-1913 „ | 544 | 496 |
| 1914-1920 „ | 1,300 | 1,434 |
| *Year* | | |
| 1919 | 2,173 | 2,099 |
| 1920 | 2,336 | 1,948 |
| 1921 | 1,614 | 1,253 |
| 1922 | 1,890 | 1,638 |
| 1923 | 1,982 | 1,448 |
| 1924 | 2,453 | 1,807 |
| 1925 | 2,573 | 2,306 |
| 1926 | 2,377 | 2,045 |
| 1927 | 2,179 | 1,992 |
| 1928 | 2,196 | 1,972 |
| 1929 | 2,216 | 2,149 |
| 1930 | 1,546 | 1,470 |
| 1931 | 1,236 | 1,147 |
| 1932 | 1,432 | 1,410 |
| 1933 | 1,917 | 1,861 |
| 1934 | 2,283 | 2,172 |
| 1935 | 2,472 | 2,499 |
| 1936 | 2,764 | 2,693 |
| 1937 | 3,783 | 3,175 |

Source : A Short Economic History of Modern Japan, G. C. Allen.

## STRUCTURE OF JAPAN'S IMPORT TRADE

*(The value of each group shown as percentage of total imports)*

| Period | Food & Drink | Raw Materials | Semi-manufactured goods | Finished Goods | Others |
|---|---|---|---|---|---|
| 1893-97 | 20·8 | 22·7 | 19·1 | 35·1 | 2·3 |
| 1903-07 | 23·5 | 33·0 | 16·7 | 25·5 | 1·3 |
| 1908-12 | 12·0 | 44·3 | 18·9 | 24·1 | 0·7 |
| 1918-22 | 12·9 | 49·2 | 22·2 | 15·0 | 0·7 |
| 1923-27 | 14·3 | 53·5 | 16·1 | 15·5 | 0·6 |
| 1928-32 | 12·7 | 55·3 | 15·5 | 15·7 | 0·8 |
| 1933-36 | 8·2 | 61·8 | 17·8 | 11·3 | 0·9 |

## STRUCTURE OF JAPAN'S EXPORT TRADE

*(The value of each group shown as percentage of total exports)*

| | | | | | |
|---|---|---|---|---|---|
| 1893-97 | 16.8 | 10.3 | 43.3 | 26.2 | 3.4 |
| 1903-07 | 11.9 | 9.1 | 45.3 | 31.1 | 2.6 |
| 1908-12 | 11.1 | 9.2 | 48.1 | 30.5 | 1.1 |
| 1918-22 | 7.6 | 5.8 | 42.4 | 42.6 | 1.6 |
| 1923-27 | 6.7 | 6.5 | 45.9 | 39.8 | 1.1 |
| 1928-32 | 8.3 | 4.2 | 39.0 | 46.8 | 1.7 |
| 1933-36 | 8.0 | 4.4 | 26.4 | 58.4 | 2.8 |

Source: A Short Economic History of Modern Japan, G. C. Allen.

## COMMERCIAL POLICIES OF JAPAN AND RECENT DEVELOPMENTS

Customs houses have known to be in existence in Japan since 1859 but she had no tariff system as we understand it today. Japan had a number of treaties with foreign countries. These treaties guided the course of customs duties. During the Russo-Japanese War some duties were imposed. In March 1906 a law was passed which consolidated into a system all previous rates of duties. This law became effective in 1911 and remained in force till 1926, with periodical amendments.

The customs duties were raised in 1916 on account of the war. In 1920 duties on imports of dyes, chemicals, metal and woodworking machinery were raised to a higher level. Again provisions were made for a surtax with a maximum rate of 100 per cent against dumping. Two years later duties were increased between 50 and 100 per cent on copper, brass and bronze in the form of ingots, bars, plates and sheets, and on wire, pipes, tubes and scrap. The rates on wool, wheat, wheat flour, rice, paddy, and hides were also raised. In 1923, certain rates were changed from specific to *ad valorem* on account of price fluctuations. In 1924, nearly 120 articles of a luxury type were subjected to 100 per cent import duty. Some of these were given partial relief during the next year. The revision of Japanese tariff in 1926 meant an upward movement of the duties on almost all manufactured goods. This measure was based on the principles of discouraging the importation of luxuries; of reducing duties on necessities of life and such commodities against which the domestic products could hold their own; of protecting home industries which were promising; and of allowing free entry to raw materials. Amendments to the Act were made in 1927 and 1929. Thereafter the Act was amended every year. In 1929 the provisions of the Act were relaxed on tea and several other luxury type of articles. The next year the free list was further extended to include certain types of cotton yarns and iron pipes and tubes. At the same time the duties on imports of cement were reduced. Two years later the tariffs were raised on articles which included agricultural products, foodstuffs and certain industrial and forestry products. In some cases duties were raised by as much as 135 per cent on account of depreciation of foreign currencies. At this time, most items were subject to specific duties and where *ad valorem* duties were imposed the rates were ranging up to 50 per cent. Different items were classified into 17 divisions.

Summing up the effects of the tariff, G. C. Allen says, "that until 1920 it had very little influence on the economic structure of the country, for before 1911 Japan's freedom to adopt protective tariff was limited by treaty, and between 1914 and 1920 normal trading conditions were so disturbed as to reduce the tariff to a position of minor significance. Even throughout the next decade, moreover, the importance of the tariff in its effects on foreign competition in the home market was overshadowed by exchange fluctuations, and it was never more than a secondary weapon in the armoury of economic policy. In only a few industries, indeed, as in the iron and steel, sugar, copper, dyestuffs and woollen industries, was the tariff ever of great significance."[1]

Exchange control in Japan became more vigorous from 1934. The war with China, which began in 1937, accelerated the process of exchange control and restrictive legislation. Japan, at this time, decided in favour of two column tariff and bilateral trade agreements to control her trade balances with other countries. One column was to be of almost prohibition tariffs and the other of low tariffs. Other countries could obtain the latter type by giving Japanese goods the most favoured nation treatment. Japan, at this juncture, was making all efforts to become economically self-sufficient. Various laws were passed regulating and controlling economic activities. In particular laws related to new industries, control of foreign trade and the iron and steel industry. In October 1934, under emergency powers, the Ministry of Commerce promulgated Orders by which further restrictions were imposed on import trade. While certain commodities were totally prohibited for importation, others were subjected to licensing. Similarly, restrictions were imposed on certain exports. The rising tariffs in Japan from 1930 onwards have been responsible for customs contribution to the total revenue being 7.4 to 10.1 per cent.

---

[1] G. C. Allen, A Short Economic History of Modern Japan, pp. 122-123.

## TRADE AGREEMENTS

Japan entered into several bilateral trade treaties during the thirties. In 1937 an unofficial understanding was reached by Japan with U.S. producers. She also renewed a treaty with India. This has been discussed in details in the section on India. She also entered into trade agreements with Turkey, Siam, Italy and Germany. In July 1939, the U.S.A. gave Japan notice of her intention to abrogate the Treaty of Commerce and Navigation of 1911.

## REGULATION OF FOREIGN EXCHANGE AND FOREIGN TRADE

When the Sino-Japanese war started in June 1937, speculative hoarding was accentuated leading to a further increase in the wholesale prices. This seriously affected Japanese exports and the yen displayed obvious signs of weakness. Japan was eager at this juncture to acquire raw materials from abroad and a falling yen would have meant higher prices for the same.

## FOREIGN TRADE OF JAPAN PROPER

*(in million yen)*

| *Year* | | *Exports* | *Imports* |
|---|---|---|---|
| 1937 | ... | 3175.4 | 3783.1 |
| 1938 | ... | 2689.6 | 2663.3 |
| 1939 | ... | 3576.3 | 2917.6 |
| 1940 | ... | 3655.8 | 3452.7 |
| 1941 | ... | 2650.8 | 2898.5 |

Source : Japan's Economy in War & Reconstrution, J. B. Cohen, p. 13.

## JAPAN'S BALANCE OF TRADE

*(in million yen)*

| *Year* | | | *Balance* |
|---|---|---|---|
| 1930 | ... | ... | – 76.1 |
| 1931 | ... | ... | – 88.7 |
| 1932 | ... | ... | – 21.5 |
| 1933 | ... | ... | – 56.2 |
| 1934 | ... | ... | –110.7 |
| 1935 | ... | ... | + 26.8 |
| 1936 | ... | ... | – 70.7 |
| 1937 | ... | ... | –607.7 |
| 1938 | ... | ... | + 26.3 |
| 1939 | ... | ... | +658.7 |
| 1940 | ... | ... | +203.1 |
| 1941 | ... | ... | –247.7 |

Source : Ibid, p. 13.

Japan's need for imports of raw materials, etc., was the greatest. The development of her heavy industries had made her increasingly dependent on foreign raw materials. She needed them again for stockpiling. She had long been suffering from an unfavourable balance of trade, which she was trying to meet by greater utilization of foreign exchange reserves, cuts in non-essential imports, and by greater gold production. The trade balance in 1937 was more adverse than in the last several years. It amounted to 607 million yen. This figure relates to Japan proper. If the trade of the Japanese Empire is taken into account, the trade balance would be adverse to the extent of 635 million yen.

From 1930 to 1934 Japan had an unfavourable balance of trade. In addition to that there was a very heavy outflow of gold in 1930, 1931 and 1932. To meet the situation the Exchange Control Law was promulgated in March 1933. Although this law gave wide powers to the Minister of Finance, the same were not used to any great extent till 1937. When the yen weakened in 1936 an Order Relating to Payments for Imported Commodities and to Restrictions on Payments by Foreign Exchange Banks on Foreign Order was promulgated in January 1937. This Order provided that payments above 30,000 yen per month for foreign imported goods would require the approval of the Minister of Finance. On 1st July, 1937, the limit was lowered to 1000 yen. In December of that year the control was further tightened by lowering the limit to 100 yen per month. In September 1937, the law was suitably amended to give powers to the Government to acquire or control privately owned foreign assets.

In July and August 1937, two new laws were enacted, *viz.*, the Law Relating to Adjustment of Foreign Trade and Related Industries; and the Foreign Trade Association Law. The former gave powers to the Government to restrict or prohibit foreign trade in any commodity on the consent of the Foreign Trade Council. The latter law made provisions for Government compulsion in establishing exporters' or importers' associations. Such associations later on were employed in administering distribution quotas.

In September 1937, the Law Relating to Temporary Measures for Export and Import Control was passed. This law gave the Government absolute powers over exports and imports.

By a rigid control of foreign trade and foreign exchange under these laws, Japan was able in 1938 to convert her adverse balance of trade into an export surplus. This state of affairs, however, was not a cause for satisfaction. Because as imports fell, exports also fell. The result was that Japan could not import essential commodities on a scale necessary for her purposes. In July 1938, therefore, a Foreign Exchange Revolving Fund of 300 million yen was appropriated from the specie reserves of the Bank of Japan. The purpose of this Fund was to finance imports of essential raw materials. In order to encourage exporters and producers of export goods a law for indemnification of bank advances was passed.

Formerly, there used to be a dual control in foreign trade. The licensing of imports was done by the Minister of Commerce and Industry, whereas the foreign exchange permit system was under the control of the Minister of Finance. This dual control was now eliminated.

Japan adopted what is known as the "link-system" in foreign trade. By this system the imports of certain articles were linked to exports. The Government would permit a certain volume of imports, provided it was guaranteed that these imported materials, after processing, etc., would be exported. Imports for domestic consumption were not allowed under this system. For example, the export of soap was linked with the imports of fats and perfumes; export of woollen goods with import of raw wool; export of cotton goods and import of cotton. Similar links were also perceived in the case of rayon textiles, pulp, etc.

Japan also passed laws like the Yen-Bloc Export and Import Commodities Control Law and the Yen-Bloc Export and Import Price Control Law, in order to bring about a parity in trade and prices between Japan proper and the countries of the Yen-Bloc (*i.e.* Manchuria, North China and Kwantung Leased Territory).

The foreign trade measures adopted by Japan prior to the Pearl Harbour were effective to the extent that conditions at the time could permit. They enabled Japan to curtail the imports of luxuries, textiles and other unessential goods and to expand the importation of essential raw materials and commodities.

## JAPAN ENTERS THE WAR

On the eve of Japan's entry in the war, in December 1941, Japan was assuming an increasingly totalitarian outlook. A country with already innumerable restrictions on individuals, its Government became more and more ubiquitous. The Government had long been in the industrial and agricultural fields in the form of tariffs, subsidies, and preferential rates of transportation to stimulate exports. It had the rice trade under rigid control since 1921. It had monopolized tobacco since 1904 and in 1911 it had imposed 355 per cent *ad valorem* duties on its importation. The Government had the silk industry and trade under its control through the aid that it provided. Similarly, the Government had made important inroads in agriculture through a system of agricultural warehousing.

Japan entered into the friendship of Germany and Italy by signing the Tripartite Pact in September 1940. It was the signal of Japan's entry into the race for world power. Such a support to the belligerent Axis powers meant increased Government interference in domestic matters and activities. This Pact was soon followed by rigid Government control over distribution and pricing, and also rationing of the necessities of life, with the consequent steep decline in the standard of living of the Japanese people.

In July 1941, Japan took over strategic bases in French Indo-China with the permission of the puppet Vichy Government in France. This action was characterised by the

U.S.A. as an aggression which tended to threaten vital supply lines of the U.S.A. The United States, therefore, joined Great Britain and Canada in freezing Japanese assets. With this freezing of assets Great Britain abrogated the Anglo Japanese Treaty of Commerce of 1911, the Indo-Japanese Trade Agreement of 1937, and the Burma-Japan Commercial Agreement of 1937. Simultaneous action was taken by other empire countries. Millions of dollars worth of Japanese assets were frozen in all these countries. Japan also lost her markets in these areas. It is important to note here that the U.S.A. was consistently the largest buyer and the largest supplier of Japan. Nearly 1/3rd of the total imports of Japan came from the U.S.A. Similarly, the U.S.A. accounted for 1/5 to 1/3 of the total exports of Japan. The trade with the U.S.A. was equal to or even greater than the total trade of Japan with Germany, the U.K., British India, China and Australia taken together. The cessation of these trading relations was a great blow to Japan. Her supplies of wheat from Australia stopped. So also raw cotton from India, tanning extracts from Australia, zinc from Burma, and iron, manganese and bauxite from Malaya. In her turn, Japan also retaliated by freezing the assets of these countries and ceasing trading relations with them.

## TRADE DEVELOPMENTS AFTER THE WAR

As compared with the pre-war years Japan's foreign trade in the years of Occupation was very small. Devastated Japan has been in need of food and other materials for reconstruction, with the result that foodstuffs are predominant among imports. Textiles dominate the exports from Japan. After the war, Japan has had a large adverse balance which was met by U.S. grants under Government and Relief in Occupied Areas (GARIOA). The chief supplier to Japan has been the U.S.A. and her important buyers are the Far Eastern countries and the countries of the sterling area. Japan does not have at present a single exchange rate but a series of multiple rates whose level depends on prevailing prices in Japan and the world market prices. In the beginning of Occupation all foreign trade was under the control of the SCAP but it was gradually restored to private hands.

In 1947, Japan's exports had fallen to a very low level of 10 per cent of the 1930-34 value of exports. Similarly, imports were about 28 per cent of the 1930-34 level. In the latter period foodstuffs constituted about 25 per cent of the total imports; this proportion had risen to about a half in 1947. Both in 1930-34 and 1947 textiles formed the most important item of Japan's export but in 1930-34, textiles accounted for 30 per cent of the total exports, whereas in 1947 this percentage rose to 60.

JAPAN : IMPORTS 1930-34 AND 1947
*(in millions of U.S. dollars at* 1947 *prices)*

| | 1930-34 | | 1947 | | |
|---|---|---|---|---|---|
| | Value | Per cent of total | Value | Per cent of total | 1947 as percentage of 1930-34 |
| Raw cotton | 450 | 24·3 | 70 | 13·3 | 15·6 |
| Other textile fibres | 163 | 8·8 | 13 | 2·5 | 8·0 |
| Metal manufactures | 43 | 2·3 | 7 | 1·3 | 16·3 |
| Ores and metals | 123 | 6·6 | 1 | 0·2 | 0·8 |
| Petroleum & petroleum products | 45 | 2·4 | 38 | 7·2 | 84·4 |
| Coal | 55 | 3·0 | ... | ... | 0·6 |
| Other mineral products | 21 | 1·1 | 14 | 2·7 | 66·6 |
| Lumber and paper products | 127 | 6.9 | 2 | 0.4 | 1.6 |
| Fertilizers | 56 | 3.0 | 67 | 12.7 | 119.6 |

| | 1930-34 | | 1947 | | |
|---|---|---|---|---|---|
| | Value | Per cent of total | Talue | Per cent of total | 1947 as percentage of 1930-34 |
| Chemicals & drugs | 40 | 2.2 | 7 | 1.3 | 17.5 |
| Foodstuffs | 498 | 26.9 | 295 | 56.1 | 59.2 |
| Fats and oils | 16 | 0.9 | 5 | 1.0 | 31.3 |
| All other | 215 | 11.6 | 7 | 1.3 | 3.3 |
| TOTAL ... | 1850 | 100.0 | 526 | 100.0 | 28.4 |

Source: Japan's Economy in War & Reconstruction, J. B. Cohen, p. 493.

### JAPAN : EXPORTS 1930-34 AND 1947
*(in millions of U.S. dollars at* 1947 *prices)*

| | 1930-34 | | 1947 | | |
|---|---|---|---|---|---|
| | Value | Per cent of total | Value | Per cent of total | 1947 as percentage of 1930-34 |
| Silk & silk goods | 360 | 19.7 | 17 | 9.7 | 4.7 |
| Cotton goods | 510 | 27.9 | 105 | 60.4 | 20.5 |
| Other textiles | 330 | 18.1 | 11 | 6.3 | 3.3 |
| Ores & metals | 40 | 2.2 | 5 | 2.9 | 12.5 |
| Machinery & metal products | 140 | 7.7 | 7 | 4·0 | 5.0 |
| Chemicals, paints & drugs | 45 | 2.5 | 2 | 1.1 | 4.4 |
| Handicraft, toys and sundries | 35 | 1.9 | ... | ... | ... |
| Fats and oils | 23 | 1.2 | 1 | 0.6 | 4.3 |
| Processed foods | 170 | 9.3 | 4 | 2.3 | 2.3 |
| All others | 174 | 9.5 | 22 | 12.7 | 12.7 |
| TOTAL ... | 1827 | 100.00 | 174 | 100.0 | 9.5 |

Source: Ibid. p. 493

The direction of Japan's foreign trade, too, underwent significant changes. In the period between 1930 and 1934, nearly 24 per cent of Japan's imports came from the U.S.A. and about 53 per cent from Asia (excluding Australia). In the same period Japan exported 23 per cent of her total exports to the U.S.A. and 60 per cent to Asia. During the Occupation Japan was so much dependent on the U.S.A. that in 1947, she obtained 92 per cent of her total imports from that country.

We have noted above that after the war, Japan was experiencing a large adverse trade balance. This was obviously because of her inability to ship goods abroad to pay for her essential imports, such as food, fuel and fertilizers. Over the first 3 years of Occupation the foreign trade deficit for Japan amounted to 800 million, approximately. This deficit was largely met out of GARIOA funds. By the middle of 1948, one billion dollars out of these appropriations were spent on Japan. It must be noted that these funds were made available to provide such things as food, fertilizer, petroleum and medical supplies, but not, however, for industrial raw materials. Later on, the United States made available funds to Japan from EROA (Economic Rehabilitation Occupied Areas).

One of the pertinent problems of Occupation was the result of the fact that imports into Japan came mostly from the U.S.A., while her exports went chiefly to non-dollar areas. This presented the SCAP with a choice either of maintaining convertibility or a shift of Japan's imports to non-dollar areas. The SCAP entered into a number of agreements with different countries by which purchases from the sterling area countries could be paid cent per cent in sterling with a provision that if surpluses were available the SCAP could convert every six months, the accumulated sterling into dollars. Again, the SCAP entered into a number of open trading agreements with a number of Governments. These agreements while providing for exchange of certain commodities did not mention types or quantities. Bi-annual settlements were provided in these agreements for payment in dollars or other currencies acceptable to the SCAP. Such agreements were made with the Netherlands, China, French Indo-China, India, etc. Occupied Japan also concluded barter agreements with India, Pakistan, Egypt, Australia, etc. Japan has promised her silk for Indo-Chinese anthracite; textile machinery for Indian cotton; rolling stock for Siamese rice; cement for lumber from the Philippines, etc.

Even though the Occupation came to an end in September 1951, the problem of Japan is as acute as it was at that time. She has to bridge the gulf between imports and exports, and to raise the level of trade in such a way that she is able to export enough to pay for the imports, which would be sufficient for reconstructing her economy so that her 80 million souls could be sustained as human beings. The Japanese are a hardworking people and they are already busy recapturing all lost markets. An all-out effort is being made to develop rapidly the production of goods like metals, tools, electrical and communication equipment, bicycles, automobiles, pots, pans, radios, mining and textile machinery, oil drilling equipment, railroad rolling stock, chemical products, etc. These goods are preferable to textiles for the purposes of foreign trade, as they make available a larger differential between selling price and cost of raw materials. It is hoped that when these industries are fully rehabilitated, Japan may yet be able to create an export surplus for herself and take her due place in international trade.

## FOREIGN TRADE OF GERMANY

The foreign trade of Germany since the end of the first World War to 1929 has been characterised by, firstly the fall in the volume of trade as compared with 1913 and secondly, the chronic excess of imports. By 1929 the German volume of production had regained its pre-war level, but the volume of foreign trade was still below the mark. On the eve of the first World War, Germany's imports were 10,800 million marks and the exports were to the tune of 10,000 million marks. At that time Germany stood next only to the U.K. in the volume of trade. Her foreign trade constituted 13 per cent of the total world trade. The post-war inflation in Germany, no doubt, stimulated for some time exports in certain commodities, but nevertheless the volume of German exports had fallen to 20 per cent of the pre-war level in 1923. A steady recovery followed the stabilization and the Dawes Plan. In 1928 the German exports had reached the level of 12,000 million marks. Considering that the prices had increased between 1913-1928 by about 40 per cent, we find that the physical volume of Germany's foreign trade in 1928 was 11 per cent smaller than in 1913. By 1928 the exports had fallen more severely than the imports. In 1913, it is said that the German exports stood at a record level, when they were about 25 per cent of the total national production. In 1928, this proportion had fallen to under 19 per cent. Again, the share of Germany in the volume of international commerce had declined from 13 to 9 per cent.

The recovery in exports has been remarkable between 1924-1929, although imports have widely fluctuated. The rise in exports has reflected the expansion in various branches of industry. But the total foreign trade was lower, as we have seen, in 1929 as compared with 1913. The fall in imports could not be regretted, and it was largely due to the loss of pre-war foreign investments and also the absolute fall in the purchasing power of Germany in respect of these imports. The decline in imports was desirable because it afforded Germany an offsetting advantage as against the heavy reparations, etc., which she was called upon to pay.

The fall in exports was a serious problem for post-war Germany. It meant that her volume of production and general prosperity were smaller and as such her ability to make foreign payments was restricted. The high level of interest rates and costs prevented German manufacturers from extending long-term credits, which was a potential factor in the decline in the volume of exports. Again, she exported mainly finished products, whose price index had risen much more compared to the index of general prices. Yet another cause of the decline of her exports, was the fall in the technical standards of German industry, during the inflation. This meant a consequent decline in the quality German goods, which could not be easily marketed.

The changes in German trade which have been described were also due to political and economic changes in other countries with which Germany had trading relations before the war. Some of these countries, whose supplies of German goods were stopped during the war, were compelled to develop industries within their own borders or to seek other suppliers. Such developments were manifest in the dyestuffs, textiles and iron and steel industries of countries which were former customers of Germany. The stripping of Germany of certain areas of industrial importance also meant a loss to Germany, which was the gain of some other countries. The spread of violent economic nationalism also led to industrial development in certain countries of Europe and this affected the foreign trade of Germany.

The second feature of German foreign trade in the post-war era has been the persistent excess of imports. In post-war years Germany had a persistent unfavourable balance of trade. If we leave out the years of inflation as abnormal, the import excess in 1924 was over 2000 million marks.

By 1928 it was reduced to 1700 million marks a year. Between 1924-1928 the total of excess of imports has been to the tune of 10,300 million marks. The average unfavourable balance between 1910-1913 was 1370 million marks per year. It was equivalent to 1920 million marks at the price level of 1924-1928. This deficit in the commodity trade balance was not a sign of strength, present or future. It was rather a cause for alarm. No doubt, Germany at this time was trying to recover on the basis of foreign loans. But these foreign debts were being incurred just because it was impossible for her to meet her current obligations. Each loan would, therefore, lead to further borrowing and a general collapse would not be far. Under circumstances, Germany had either to increase exports steeply or curtail her imports severely.

How difficult it was for Germany to curtail her imports could be realised from the following figures of the composition of her trade during 1924-1928.

PERCENTAGES

| | *Imports* | *Exports* |
|---|---|---|
| Foodstuffs & livestock ... | 33.5 | 5.5 |
| Raw materials and half finished goods ... | 50.0 | 21.5 |
| Finished goods ... | 16.5 | 73.0 |
| | 100.0 | 100.0 |

These figures show the excessive dependence of Germany on foreign imports of food and raw materials. She could not grow enough food within the country; nor could her industries do without imports of foreign raw materials. Besides her exports comprised mainly of finished products, which could not be produced without bringing raw materials from abroad.

Turning to the direction of German trade we find that by 1929 the chief channels of her foreign trade were substantially the same as in 1913. We must, however, remember that during the abnormal years of the inflation, this was not true. Again, a qualification must be made regarding the territories lost by Germany, the trade and production from which were obviously not available to Germany. The following tables show that Germany used to buy in 1913, 54.7 per cent of her total imports from Europe, 27.8 per cent from the American continents, 4.6 per cent from Africa and 3.0 per cent from Oceañia. In 1924 these proportions were hardly changed, and in 1929 there was a decline in imports from European countries from 54.6 per cent (1924) to 48.9 per cent. This loss was made up by small rises in the proportions of North and South Americas, Asia and Africa. A casual perusal of the table of German exports will also reveal a similar picture. The porportions of different continents are almost unchanged over 1913, 1924, 1929 and even in 1938. It should be noted that despite political and other changes Europe as a whole was not only the best source of Germany's imports, but also the best customer. Amongst countries, Great Britain remained in post-war years the best customer of Germany and the U.S.A. her best source of imports.

Germany used to be a creditor country to a certain extent before the first World War. The adverse commodity balance of trade was thus made up by the interests and dividends due from the foreigners. She again used to reinvest considerable sums abroad in such forms that helped to expand German trade and industry. We have noted that Germany lost practically all her foreign investments. She also lost large amounts of credits which were formerly provided by her shipping. On the other hand, she had now to remit large sums in way of reparations to the Allied powers. She had, therefore, to attempt a recovery of her mercantile marine to provide for the lost credits. But that was a great task and hence the only way out for her was to build up export industries sufficiently strong so as to provide an export surplus.

Through the period of inflation, there could not possibly be an orderly solution of the problem. During the Dawes Plan there was witnessed a recovery in efficiency in production as well as in trade. Between 1925-1929, Germany's exports were rising. German imports of foreign capital practically ceased in the second half of 1930. The trade balance which was negative became suddenly active in that year.

### German Balance Of Trade

[*in milliard* (1000 *million*) *reichsmarks*]

| | |
|---|---|
| 1925 | −2.3 |
| 1926 | +0.8 |
| 1927 | −2.8 |
| 1928 | −1.2 |
| 1929 | +0.04 |
| 1930 | +1.6 |
| 1932 | +1.07 |
| 1933 | +0.66 |
| 1934 | −0.28 |
| 1935 | +0.11 |
| 1936 | +0.55 |
| 1937 | +0.44 |

But this rise in exports was accompanied by an increase of imports with the result that the gains were almost wiped out. The increase in exports was mainly in finished manufactures. Between 1925 and 1929, the exports of coke, coal, chemical products, iron and steel, electrical machinery and equipment, other machinery increased.

From 1931 onwards, the balance of trade was deteriorating. Between 1932 and 1934, the terms of trade were becoming adverse for Germany. That is to say the average prices of German exports fell by about four times the fall in the average prices of German imports. In 1933, Germany could slightly reduce her food imports because of a good harvest at home. In the next year, the exports fell and the imports rose steeply. The fall in exports was due to a fall in international trade values, growing competition from countries with devalued currencies, and to an all-round extention of tariffs and exchange restrictions all over the world.

From 1931, exchange control was instituted in Germany but initially it was meant only to conserve foreign exchange and to protect the mark in international centres. There was, however, a tremendous strain on the exchange value of the mark. Up to June 1933 there was comparatively very little restriction on imports and till then foreign exchange was readily available. From here on, however, Germany developed a complex system of exchange control, by which she was able to achieve a favourable balance of trade from 1935 onwards.

The first Four Year Plan was inaugurated by Hitler in May 1933. During 1934-1936 German foreign trade saw the full effect of the Plan. German merchants and manufacturers were undergoing a severe trial at this juncture. Under Hitler's regime the merchants had to break most of the trading connections which they had laboriously built since the war. The manufacturers could not now get the supplies of raw materials to which they had got accustomed so far. The Plan, however, achieved its main purpose of turning the negative balance of trade into a positive one. Now there was a notable change in the distribution of German trade. Germany's trade with the neighbouring countries of S. E. Europe and of South America increased;

while that with the U.S.A., Australia, France, Holland and the U.S.S.R. fell off. Exports rose still further in 1936 due partly to the general revival of world trade and also to the efforts of the German exporters and the Government. The Government imposed a levy on the rest of the industry in order to aid, by subsidies, etc., exporting industries whose costs were higher than the world costs.

The period of the second Four Year Plan occupied the period between October 1936 and March 1938. During this period also Germany's exports and imports increased and she was sharing the general revival of world trade. By 1937 the volume of international trade had reached the level of the boom year of 1929. Germany had by this time achieved the goal of full employment and between 1936 and 1937 her exports rose by about 23 per cent. This was achieved in spite of the fact that the terms of trade were against Germany. During this period the prices of German imports rose by over 10 per cent, while the prices of her exports rose only by 3.6 per cent.

The revival of the world-wide trade was based on the internal expansion in different countries and the consequent rise in raw material prices. In the summer of 1937, the American economy witnessed a break in the revival. This gave way to a recession which spread to the rest of the world except Germany, Italy and Japan, whose economies were almost placed on war-time basis. Germany experienced a falling off of orders in 1938, in which year she experienced a negative balance for the first time since 1934. German exports at this time, fell off more rapidly than the British exports, probably because of the intensity of employment and activity in the domestic market.

### PRINCIPAL DESTINATIONS OF GERMAN EXPORTS

*(in percents of total)*

| | 1913 | 1924 | 1928 | 1938 |
|---|---|---|---|---|
| Great Britain | 14.2 | 9.3 | 10.0 | 7.0 |
| Holland | 9.9 | 6.9 | 9.75 | 8.3 |
| U.S.A. | 7.1 | 7.5 | 6.6 | 2.75 |
| France | 7.8 | 1.8 | 6.7 | 4.1 |
| Czechoslovakia | ... | 5.9 | 5.4 | 2.5 |
| Switzerland | 5.3 | 5.7 | 4.75 | 1.5 |
| Italy | 3.9 | 3.7 | 4.5 | 5.6 |
| Belgium | 5.5 | 1.4 | 4.0 | 4.25 |
| Sweden | 2.3 | 4.4 | 3.6 | 5.0 |
| Denmark | 2.8 | 4.4 | 3.5 | 3.75 |
| Austria | ... | 4.8 | 3.5 | 2.2 |
| TOTAL | 56·8 | 55·8 | 62·3 | 46·95 |
| Europe | 76.1 | 72.0 | 75.1 | 74.1 |
| N. & S. Americas | 15.3 | 16.8 | 14.6 | 15.15 |
| Asia | 5.4 | 8.6 | 7.1 | 9.8 |
| Africa | 2.1 | 2.1 | 2.3 | 3.8 |
| Oceania | 1.0 | 0.4 | 0.6 | 0.9 |

## PRINCIPAL SOURCES OF GERMAN IMPORTS

*(in percents of total)*

| | 1913 | 1924 | 1928 | 1938 |
|---|---|---|---|---|
| U.S.A. | 15.9 | 18.8 | 14.4 | 7.3 |
| Argentina | 4.6 | 5.7 | N.A. | N.A. |
| Great Britain | 8.1 | 9.1 | 6.4 | 5.25 |
| France | 5.4 | 7.7 | 6.8 | 2.6 |
| Holland | 3.1 | 4.7 | 5.1 | 3.6 |
| British India | 5.0 | 4.3 | N.A. | N.A. |
| Czechoslovakia | ... | 4.8 | 3.8 | 2.3 |
| Italy | 3.0 | 4.1 | 3.3 | 4.5 |
| Belgium | 3.2 | 1.8 | 3.4 | 3.5 |
| Dutch Indies | 2.1 | 2.7 | N.A. | N.A. |
| Russia | ... | 1.4 | 2.7 | 0.85 |
| Europe | 54.7 | 54.6 | 48.9 | 54.1 |
| N. & S. Americas | 27.8 | 28.2 | 29.4 | 25.2 |
| Asia | 9.8 | 10.0 | 11.3 | 11.5 |
| Africa | 4.6 | 4.2 | 5.1 | 7.0 |
| Oceania | 3.0 | 3.0 | 2.6 | 1.2 |

## COMMERCIAL POLICIES OF GERMANY

In reviewing the development of Germany after 1914, it must be remembered that Germany after 1914 was not the same as the Germany known to the world from 1870 to 1914. Germany's post-war economic development is necessarily coloured by the facts of the loss of Alsace-Lorraine, her colonies and the mill-stone round her neck of the huge war reparations.

During the war, Germany was cut off from the rest of the world. She was forced to put embargoes on foodstuffs and raw materials and live on very strict and scanty rations.

At the end of the war her policy was obviously one of protection to agriculture and dairy farming. The index of her agricultural prices also was higher than elsewhere. But she had removed all agricultural duties as she was dependent on foreign supplies up to 1924. Before 1914 the rates on manufactured goods were moderate; but they were enhanced during 1922-23. The Versailles Treaty did not allow Germany tariff freedom for five years from the signing of the Treaty. During the period Germany had to accord most-favoured-nation treatment to all the Allies and the U.S.A. without any reciprocal claim. She introduced a licensing system making every transaction in manufactured or semi-manufactured goods a separate one. In 1922 Germany ordered an increase of 50 per cent in import duties. Later during the year, increases between 50-100 per cent were ordered on items which were previously excluded.

A protectionist revival was witnessed in Germany after 1925, when she became once more independent to determine her own economic destinies. In 1927 tariff revisions were made in nearly half of over a thousand items. These duties in most cases were considerably higher than in 1913 and although the imports of manufactured goods were subject to higher duties the tariff as a whole had an agricultural bias.

Between 1925 and 1927, Germany concluded bilateral trade treaties with Italy, Switzerland, Sweden and France. When the depression came Germany introduced a general system of import control to prevent flight of capital and also to ration out the available exchange among importers. The amount so available to importers was gradually reduced to 50 per cent by May 1932. Next year a Foreign Trade Council was created with an avowed aim of promotion of trade. By 1934 Germany's exports had risen by 6 per cent and imports reduced by 13 per cent as compared with the previous year. This was achieved partly by clearing agreements with different European countries.

We have discussed at length in Vol. I of this work as to how Hitler sought to make Germany into a world power

He employed all the tools of mercantilism, *viz.*, treasure, goods, population, food, ship, colonies, and also Machiavellian tools of political morality, in a much more effective, modernized manner. He employed confiscation, bureaucratic control of exports and imports, licences, quotas, embargoes, and exchange restrictions. Hitler succeeded in isolating Germany from the rest of the world in a manner which freed the German markets from the influence of world prices. The barter agreements concluded by Nazi Germany enabled her to obtain essential supplies of basic materials without the intervention of money or other exchange instruments.

The need for mercantilist methods was the direct outcome of the Versailles Treaty, which forced Germany to surrender all her colonies. These colonies had an area 5½ times that of European Germany. These colonies, with a population of 15 million people, comprised of varied types of geographical environments. On the eve of the first World War the approximate value of the exports of her colonies to Germany was to the tune of 5,000 million marks. These colonies were rich sources of cotton, wool, oils and fats, hides, lumber, tanning materials, hemp, rice, tobacco, grains, tropical fruits, etc. , etc. Similarly, she had given up at the Versailles Treaty, Alsace, Lorraine and the Saar to France; and certain portions of Silesia to Poland. These territories contained over 6 million inhabitants, 26 per cent of Germany's zinc ore and 25 per cent of her blast furnaces. Besides this loss she had to surrender immense quantities of movable property, goods, live-stock, etc. And all these did not count towards reparations. Thus, the Versailles Treaty left Germany very poor in all respects—devoid of colonies, army, navy and ships, food, goods and subject to unfavourable treatment in world markets.

After 1933, therefore, Germany turned to her poorer European neighbours for supplies of foodstuffs and raw materials. This gave her an advantage of dealing with them on her own terms and secondly, freedom from oceanic transport. She also could exert a considerable control on their production and economies in general. Germany thus sought from them economic benefits due to a mother country without the political burden of obligations towards the colonies. The exchange control, barter deals, credits and loans, the insistence of country of origin were so systematically devised and arranged that Germany was in a position to dictate the neighbouring countries as to what they should grow or manufacture. This enabled her to be ready for war and an economic blockade by September 1939.

The lack of oil, rubber, coffee, etc., which were not produced in Germany's sphere of economic influence, was made up by barter agreements with South American countries. For example, after March 1938, Germany and Italy were getting their oil supplies from Mexico on a barter arrangement. Germany had also such arrangements with Brazil, Ecuador, Chile, Peru, some countries of Central America and China.

J. B. Condiliffe has given a brilliant account of these German methods of trading. He writes : "................. thrusting the financing of trade on to the financially weaker countries, depleting their foreign exchange reserves, depreciating their external credit, pressing down the external value of their currencies, spoiling their export markets by dumping of surpluses, and raising their domestic price levels, Germany was playing for much more than a temporary advantage in current trade. In the totalitarian conduct of trade policies, by using the methods of discriminating State monopoly, the German authorities were doing much more than establish a 'bilateral equalization' at the expense of the German consumers. They were, in fact, building a new trading system, the centre of which was the German military economy—a bilateral system in which all the traffic flowed to and from the centre. This system was not designed to broaden into multilateral interchange in which there would be room for all the great trading countries to co-operate. It was designed to supplant and destroy the world trading system that Great Britain had built up and that the United States was trying to revive. Its methods are best understood when compared with those by which great monopolistic corporations have attempted, by horizontal and vertical integration to destroy the trade of their competitors. In such struggles for power, full use is made of discriminatory prices, dumping, massive raw material purchases, and even of terrorism. While the struggle is in progress, the smaller traders who supply materials or purchase the finished products may gain substantial advantages; but the achievement of even a partial monopoly advantage by one of the great competitors is apt not only to deprive them of such advantages, but to put them in a position where they must pay tribute."[1]

On the 1st April, 1939, Germany put on the statute book a law called the Consolidated Customs Law of 1939. It constituted a complete customs law for Germany and consolidated all tariff laws from 1870 up to date. This Law related to (*i*) the legal and structural organization of customs; (*ii*) the law of customs obligations; (*iii*) the law of customs procedure; (*iv*) prohibitions; and (*v*) transitional and definitive provisions.

## Post-war Developments

Germany signed the Allied terms of unconditional surrender on May 7, 1945. Germany was divided a month later for an indefinite period into four military zones administered by the U.S.A., the U.K., France and the U.S.S.R. Greater Berlin was placed under joint supervision and administration of these powers.

The Potsdam Declaration, which was made on 2nd August, 1945, reduced Germany by all the Nazi annexations after 1939 and all her former territory east of the Oder and Western Neisse rivers. According to that Agreement Germany was to pay reparations by the delivery of gold, all foreign assets, and all machinery and equipment used in the manufacture of arms and ammunitions, ocean shipping, synthetic ammonia and gasoline, airplanes, aluminium, magnesium, synthetic rubber, and other industries of military importance. For further information on the developments immediately after surrender the reader is referred to the first Volume of this work, pages 276-279.

---

[1] J. B. Condiliffe, The Reconstruction of World Trade, pp. 261-62

The effects of the Potsdam Agreement on Germany's exports which were essentially of the manufactured type can be easily pictured. Now the Occupation has come to an end and Germany stands divided in Eastern Germany and Western Germany, with two independent Governments with diametrically divergent political colours. Eastern Germany has been a part of Russia's sphere of influence, whereas Western Germany is trying to become a full-fledged member of the Western European community.

We shall now try to review, as far as is possible with the limited data available, the developments of trade from this period onwards. By the end of 1948, the economy of Western Europe as a whole had recovered in industrial and agricultural production to the pre-war level, and this provided the basis for the expansion of Europe's exports from 1949 onwards, and especially the intra-Western European trade.

The most important factor in the recovery of intra-Western European trade was the recovery of Germany prior to 1949. This trade was lagging behind because of the necessity of food, raw materials and capital goods for domestic consumption. This was low because of the low level of production and trade in Germany and other devastated countries of Europe. Germany's exports from 1949 went among European countries chiefly to France, Sweden, Italy, Belgium, Luxembourg and the Netherlands. The recovery of heavy industry in Germany was rapid and the exports consisted of goods of all branches of industry except the textiles.

The German imports also rose from 1949 onwards, but the increase was enjoyed by countries of Western Europe, while the share of the U.S.A. remained unchanged. Half the increased imports of Germany in 1948 were provided by Belgium-Luxembourg, the Netherlands and Italy. The increased imports consisted primarily of foodstuffs, and to a lesser extent, of textiles and raw materials. She imported fruits and vegetables, meat, fish and dairy products, sugar and cocoa mainly from Holland. Italy also sent her fruits and vegetables. Belgium exported sugar to Germany. Textiles were imported from Italy, Switzerland and Belgium. In 1950, Germany's imports of grains, meat and dairy products, fats and oils from the U.S.A. were reduced; the same being now purchased from European countries and to some extent produced at home. Germany imported from the U.K. wool, yarn, and woven and knitted products.

After 1948, Eastern Germany's trade with Eastern European countries has also shown a rapid rise. In April 1950, the provisions of a Trade Agreement between the U.S.S.R. and Eastern Germany were announced by which the trade between these two countries was to be raised in 1950 to 35 per cent above the level of 1949. Under this Agreement 85 per cent of the exports of the U.S.S.R. to Eastern Germany will consist of foodstuffs and raw materials. A similar proportion of the latter's exports to the former will comprise of finished products like, industrial equipment, precision machinery, optical instruments, porcelain and glassware, chemical products, etc. In intra-Eastern European trade the pattern is returning to the pre-war model. Czechoslovakia and Eastern Germany are the chief sources of manufactures with which they buy the primary products of other countries of Eastern Europe.

Before World War II, Germany had an export surplus with the rest of European continent. The war eliminated Germany as the chief source of manufactured goods for the continent. In fact, Germany had a deficit with Europe, as well as the dollar area, up to 1950.

Many European countries had a dollar deficit. To bring about some sort of multilaterality in intra-European trade it was decided that the dollar funds received through the European Recovery Programme should be used to finance trade deficits among European countries. In October 1948, it was decided that dollar funds should be made available to countries which were creditors on the intra-European account on condition that such countries extended equivalent grants (the so-called "drawing-rights") to participating intra-European debtor countries. A new agreement was made in September 1950 by these countries participating in the European Recovery Programme. This agreement established a European Payments Union (EPU) under which the members would periodically settle within the group all balances, in excess of established quotas, in western European currencies. Thus every member of the EPU would apply its surpluses with some countries to offset deficits with others and will be concerned only with its balance with the EPU as a whole. The EPU includes certain oversea areas including the whole sterling area within which the currencies of members circulate freely.

In September 1950, Western Germany's deficit in the EPU grew to $357 million. Germany's quota in the Union is only $320 million, while her gold and dollar reserves were only $200 million on 30th June 1950. In order to avoid the depletion of these reserves, in November 1950, Western Germany was granted a special credit of $120 million to be repaid before 31st December 1951. Although, Germany's exports had been rising, deficit was created by heavy imports, especially in anticipation of an appreciation of the sterling.

After the devaluation by several countries in 1949, there was a substantial decline in Western Europe's requirements from the dollar area. The devaluation also coincided with a substantial German industrial recovery which enabled the Western European countries to substitute German for U.S. goods. The immediate effect of devaluation on

Germany was a very adverse shift in the terms of trade. This was due to the fact that Western Germany buys a greater proportion of her imports in non-devaluing countries than other countries which had a devaluation of the same magnitude.

Since 1948 the exports of the European countries have been rising faster than production. This has been true of Western Germany also. The rise in the European exports both overseas and with Europe has been to a certain extent at the expense of the U.K., whose supreme position has declined. The greater proportion of the increase in the exports of Western Germany has been with European countries. In 1950, European countries took 75 per cent of Western Germany's total exports. Her overseas exports have, no doubt, been increasing faster than that of other European countries but her share was only 5 per cent of Europe's total exports to overseas countries in 1950. This used to be 15 per cent before the war. It must be noted here that the expansion of German exports has not meant any competitive pressure on other European countries. This is because of the general expansion of demand.

Germany was successful in utilizing to the full the opportunities opened out by her devaluation of more than 20 per cent. Devaluation can be successful if importers are prepared to switch purchases from one supplier to another in response to changes in price relations. But this is not a sufficient condition for the success of devaluation. It also requires that the devaluing country itself is in a position to expand its exports so as to meet the increased demand. Western Germany had a great unused industrial capacity and with a vigorous expansion of production she was able to increase the exports.

The trade of Eastern Europe also registered an expansion in the years 1949 and 1950. A considerable part of the expansion of the Eastern European trade consisted of an increase in the trade of Eastern Germany with the smaller neighbouring countries of Eastern Europe. This increase reflects the recovery of production in Eastern Germany. This expansion of trade among countries of Eastern Europe is in contrast with the growth of trade in years immediately after the German surrender, during which it centred in the trade of each of these countries with the Soviet Union. The trade in the Eastern European countries is guided by trade agreements with the U.S.S.R. The U.S.S.R. exports as well as imports investment goods. Czechoslovakia and Eastern Germany are two regions deficit in food, to which the U.S.S.R., along with Bulgaria and Rumania, supplies foodstuffs and raw materials. Eastern Germany supplies equipment and machinery as well as such consumers' goods as glassware and porcelain to the less developed countries of Eastern Europe and to the U.S.S.R.

A strong improvement in the external balance of Western Germany was witnessed in 1951 and 1952. It was expected that industrial production would rise at the rate of 6 per cent a year for 1953 and 1954. This would bring about a further increase in total employment and a progressive reduction of unemployment. Although Western Germany has unemployed men and unused industrial capacity, the incidence of her unemployment is geographically uneven, with the result that labour still remains a scarce factor in certain enterprises. By 1952 a large part of the post-war economic reconstruction had been accomplished. The gross national product rose by 6½ per cent over the previous year. There was a sustained expansion of exports and favourable development in the terms of trade, which produced a substantial improvement in Western Germany's balance of payments. Her share in world exports, however, remains well below pre-war. In 1952, the volume of exports rose by 8 per cent over 1951, and in the first three quarters of 1953, it rose by 13 per cent over the same period of 1952. In 1952, the value of German exports rose by 16 per cent over 1951 and in the first 10 months of 1953, it rose by 7 per cent over the same period in 1952.

With the favourable trend in exports, the Western German Government relaxed credit and other restrictions on imports, which were imposed at the time of post-Korean crisis. Since 1951, the volume of imports has increased substantially more than that of exports. But the favourable terms of trade have resulted in creating a trade surplus for the country. The trade surplus was $ 374 million in 1951, $ 548 million in 1952 and about $ 600 million up to October 1953. Thus in spite of the continued fall in external aid, Western Germany has been able to build up a dollar and gold reserve of $ 1,049 million by October, 1953. She has also been enjoying a surplus with the EPU. This surplus amounted to 263 million units of account between July 1952 and June 1953. Germany's dollar balance has also improved recently. In 1951 she had a dollar deficit of $377 million. It was reduced to only $ 27 million in 1952. This was due to a reduction of imports from the U.S.A. and Canada. Again her exports to North America have remained steady and those to the Central American countries more than doubled in 1952. There has also been a fall in net transport expenditure. And finally, the dollar earnings of Germany have increased two-fold from transactions of the Occupation authorities.

Thus the recovery and expansion are taking place at an adequate pace in Germany. It is expected that this expansion would continue without any significant internal or external disequilibrium. However, Germany's economic and political problems, arising out of the partition of the country and late start in recovery, still remain. There are the problems of the refugees, repair of war damage and the concentration of unemployment in certain areas. The Western German Government hopes to be able to cope up with them if the present level of economic activity is not interrupted for another couple of years.

Regarding balance of payments it is expected that over 1953 and 1954 there would be overall surpluses. In 1952, the external trade surplus was $ 462 million. In 1953 the surplus was forecast at $ 262 million. The U.S. aid to Western Germany would be $ 70 million for 1953 and $ 35 million for 1954. The pattern and volume of exports and imports are not expected to change over this period.

In the financial year 1953-54 changes in the fiscal structure were intended to create a more favourable atmosphere for the financing of investment and restoration of the capital market.

The emergence of Western Germany from a period of intensive post-war reconstruction assisted by external aid is now an established fact. The structure of prices and production has shown a remarkable flexibility. The level of investment is adequate to provide for a dynamic economy. Confidence in the currency has been attained and in balance of payments a surplus has been achieved.

# SELECTED BIBLIOGRAPHY

1. Trade, National Planning Committee.
2. Foreign Trade of India, 1900-1940 by H. Venkatsubbiah.
3. Foreign and Internal Trade of India, by T. S. Katiyar.
4. India's Foreign Trade (Part I & II) by L. K. Jha.
5. India's Balance of Payments, 1948-51, Reserve Bank of India.
6. Soviet Foreign Trade, by A Baykov.
7. Soviet Trade and Distribution by L. E. Hubbard.
8. The Development of Modern World Trade by Issac Lippincott.
9. International Economics by Enke and Salera.
10. International Trade, Tariff and Commercial Policies by Asher Issacs.
11. International Trade, Foreign Investment and Domestic Employment, C.E.D., New York.
12. Annual Reports, Reserve Bank of India.
13. Britain, an official handbook, C.O.I., London.
14. The Intelligent Man's Guide to the Postwar World, by G.D.H. Cole.
15. Economic Development in Europe by Clive Day.
16. World Economic Report, United Nations.
17. Progress and Problems of the European Economy; O.E.E.C.
18. Economic Survey of Europe; Economic Commission for Europe.
19. The Recovery of Germany by J. W. Angell.
20. The Economic Recovery of Germany, 1933-1938 by C. W. Guillebaud.
21. Eastern Industrialization & Its Effects On The West by G. E. Hubbard.
22. A Short Economic History of Modern Japan by G. C. Allen.
23. Japanese Industry : Its Recent Development & Present Condition by G. C. Allen.
24. Japan's Economy in War and Reconstruction by Jerome B. Cohen.
25. Japan, Special Supplement to Commerce, 28-8-1954.

## CHAPTER III

# TRANSPORT

## TRANSPORT IN GREAT BRITAIN

### RAILWAYS IN GREAT BRITAIN

Great Britain possesses a very extensive network of railways amounting to 20,408 route miles. Over 99 per cent of this mileage is standard gauge (4 ft. 8½ in.) and the rest narrow gauge. Since World War I there has only been a slight increase in railway route mileage in Great Britain. It is true that there is no further scope for railway extension or construction except duplication of tracks,short extensions into new industrial regions or branches into new suburban areas. At present Britain has more railways per square mile than any other country in the world, except Belgium. The British railways are the busiest railways in the world, running 40,000 passenger and goods trains daily, carrying about 3 million passengers a day and about 3/4 million tons of freight each week-day.

After 1918, the railways were concerned in recovery from war conditions. During the war and for some time afterwards, the railways had to carry free troops and materials, including requirements of munition factories and their output. In this period maintenance and repairs were reduced to the minimum and large quantities of railway rolling stock including even permanent way had been sent abroad. Obviously, the railways had first to make up these arrears in order to reach their pre-war efficiency. The Government paid the railways in all £60 million for wartime arrears of maintenance, repairs, etc. But it cannot be said that the railways profited out of the country's needs.

The railway recovery received a setback on account of the railway strike of 1919. This also gave an impetus for starting competitive road transport. In 1921 a comprehensive Railways Act, was passed by which the railways were returned to ordinary commercial management. In returning railway management back to the companies, the Government sought an opportunity to readjust the relations of the railways to each other, to their workers, customers and the State. By 1920, out of the 1,000 railway companies originally promoted only 214 remained. This Act provided for compulsory amalgamation of independent companies into four large groups. In 1923, the greater part of the British railway system was reorganized by these combinations. In this manner, 120 railway companies out of a total of 214 separate companies were amalgamated into one or the other of these four groups. It should be noted that the British railways had originally grown up in a haphazard fashion and, therefore, it was impossible to effect a geographical redistribution of the companies into definite areas exclusive to each. The Railways Act, 1921 prohibited the amalgamated companies to enter into agreements with each other for the allocation of traffic or for pooling of receipts, etc. Such agreements could, however, be made with the consent of the Minister of Transport. Thus, in order to bring about a logical completion of the amalgamations effected in 1923, schemes of traffic pooling were introduced in competitive areas. The emergence of road transport as a serious challenge to the railways had by 1932 broken the erstwhile partial monopoly of railways, with the result that the public opinion had by now become less hostile to railway amalgamation or any other scheme of pooling or combination.

The railway regrouping did not eliminate competition. A study of their working shows this and also throws light on the capital expenditure of these companies. The British railways even to this day are heavily capitalized. In all these companies or groups, a great amount of capital is necessarily involved in the provision of a railway system. Another feature is the fixed nature of investment, which once expended is largely tied to a particular route and lastly, the overhead charges are preponderant in total costs. It is claimed that traffic pooling would eliminate a lot of costly expenditure on competitive facilities, increasing the facilities for the public at the same time.

The Railways Act introduced important changes in the charging powers of railways. The Act established a Railway Rates Tribunal with wide powers in regulating rates, fares and other charges. The principle of 'Standard Revenue' replaced the old system of maximum rates. New classifications for goods and merchandise were introduced on 1st January 1928. Much labour was spent in preparing new classifications, which aimed at eliminating millions of special and exceptional rates. However, all this labour was mostly wasted because a keen competition from motor transport and the trade depression compelled the railways to continue their erstwhile policy of granting exceptional rates.

In the post-war years, the railway expenditure has increased tremendously due to a rise in the cost of materials and labour costs. Since 1923, however, the working expenses of railways decreased due to various economies and reduction of prices of materials. Reductions in wages have also been effected since 1928, which afforded the companies sizeable saving.

In 1913, the railway net revenue was £42·1 million. The other revenue obtained from ancillary enterprises such as docks, hotels, rents, etc., was £3·1 million. Thus, the total net revenue was £45·2 million. For 1923 these figures were, respectively, £38·7 million, £6·9 million and £45·6 million. In 1931, the railway net revenue had fallen to £29·4 million. The other revenue was £3·4 million and the resulting total net revenue was £32·8 million. The fall in the revenue since the war is ascribed to the combined influence of trade depression and road transport competition.

## RAILWAYS AND MOTOR ROAD TRANSPORT

The post-war period saw a vigorous competition from the new mechanical road transport. It broke completely the monopoly that was enjoyed by the railways in the pre-war days. We have noted earlier that the first start was given in 1919 when the railwaymen had gone on a strike. The end of the war made available large number of vehicles, and ex-servicemen turned lorry drivers. This was an important factor in the growth of road transport. This factor operated even in India after 1919. The railways received a further setback from road transport in the industrial upheaval of 1926, when a large amount of traffic was lost by the railways.

The railways had tried with indifferent success in 1921 and again in 1922 to obtain legislative powers to invest in road transport concerns or to operate their own services on a more extended basis. Meanwhile, road transport was developing at an astonishing rate. In 1928 the railways made a vigorous and determined efforts to obtain road transport powers. This was a recognition of the fact that road transport had come to stay. The four railway groups did obtain this time the necessary legal sanction for investing in road transport concerns and to extend their own road transport services. They started negotiations with passenger road transport services and numerous agreements were effected. This resulted in a great interlocking of capital between the railways and a majority of road passenger services. The railway companies did not start their own road passenger services but, in fact, they handed over almost all of their own bus services to the associated road companies. This has created serious difficulties of co-ordination, which are sought to be met by developing inter-availability of tickets, through bookings, dove-tailing of time tables, substitution of motor bus services for passenger trains on unremunerative branches, etc. A licensing system was introduced by the Road Traffic Act, 1930 as a further attempt in co-ordination.

The reasons for the success of motor road transport as against the railways are not far to seek. In spite of their several handicaps the operators of the motor road transport services had furnished to the public a means of travel which was attractive, cheap and efficient. The public response to the facilities offered by them is sufficient answer to the question as to whether there was need of them. Except for factories possessing their own railway sidings or canal wharves road transport has one estimable advantage, among others, over both railways and canals, *viz.*, door to door collection and delivery of goods. In the majority of cases, however, the assistance of road transport has to be utilised to initiate and complete the carriage of goods and passengers.

The transhipment of goods from one form of transport to another involves delay as well as expense. The railways have, however, been sufficiently progressive to see and partially ameliorate this disadvantage, of transport transhipment by introducing a method of small bulk deliveries by means of sealed containers which are lifted bodily from the railway trucks, placed upon road vehicles and delivered at their ultimate destination, such as factories or shops. Even with these aids, the 100 per cent complete convenience of door to door collection and delivery made possible by road transport can be equalled neither by the railways nor canals.

From 1928 onwards, the railways developed railhead services, the extension of the use of containers and the rural lorry services. In 1939, the railways owned for these services 15,521 containers, 10,367 motor vehicles, 11,163 horses, and 24,823 horse vehicles. In regard to goods traffic the railways did not combine with established road hauliers but they extended the services mentioned above. They also extended their cartage areas and started new road services for collection and delivery of merchandise and livestock. These forms of co-ordinated road-rail transport services can be regarded as the most important development of railway transport in recent years.

## RAILWAYS AND CANALS

There are in Great Britain today many canals in as good a condition as when they were constructed 150 or more years ago, especially in Birmingham area, which can be regarded as the centre of the canal system. Many British canals are monuments of engineering skill with immense cuttings and embankments, many tunnels and magnificent aqueducts. That inland water transport is obsolete is a completely wrong notion, which probably arises from the observation of many English canals which are in a neglected condition, overgrown with weeds, partially silted up or completely derelict.

By 1947, nearly one-third of the total number of canals had come under ownership of the railways. The present total mileage of canals is at present 1752 miles. When the Transport Act came into force in 1948, the majority of canals were nationalized. Since then the nationalized canals were operated and administered by the Docks and Inland Waterways Executive, under the authority of the British Transport Commission. For purposes of operation the British Canal system is divided into four divisions. The administration is decentralised as far as possible and the divisional waterways officer is given wide powers in the management of local business.

In 1913 the canal traffic amounted to 24 million tons, of which the traffic carried by railway-owned canals was 12 per cent. Although the canals also competed with the railways for traffic, the competition of the canals was not as serious as that of motor transport. Again it is said that the railways were to a large extent responsible for strangling inland water transport 'through their neglect of several canals under their ownership. During the post-war period canals suffered from the depression in heavy industries as well as from the competition of motor transport. In 1931, the total traffic on canals was 12.4 million tons of which the railway-owned canals were responsible for 1.5 million tons. In 1952, the total canal traffic was only 12.4 million tons.

Transport by canals is particularly suited to the carriage of bulk merchandise, *e.g.*, coal, which can be stock-piled at canal depots and delivered by lorry in large or small quantities, as required by factories or householders.

## PRESENT POSITION OF BRITISH RAILWAYS

When the second World War broke out, the Government took control of the railways as they had done at the time of the first World War. They guaranteed the railway companies and London Transport a fixed sum of £43½ million per year. Under the Transport Act of 1947, the British Transport Commission was established. It was to consist of a Chairman and four to eight other members appointed by the Minister of Transport. The Act said that the Commission shall provide or secure or promote the provision of an efficient, adequate, economical and properly integrated system of public inland transport and port facilities within Great Britain for passengers and goods. Under the Act the ownership of the whole main-line railway system of the country was nationalized. The British Transport Commission have delegated their functional powers to the following executives :—

1. The Railway Executive, 2. The London Transport Executive, 3. The Road Haulage Executive, 4. Road Passenger Executive, 5. Docks and Inland Waterways Executive, and 6. The Hotels Executive.

The following statistics at the time of the nationalization will give an adequate idea of the responsibility of the Railway Executive.

| | |
|---|---|
| Companies absorbed ... ... | 60 |
| Track mileage ... ... | 52,000 |
| Locomotives ... ... | 20,000 |

| | |
|---|---|
| Passenger rolling stock ... ... | 40,350 |
| Freight traffic vehicles ... ... | 1,165,000 |
| Steamships ... ... ... | 135 |
| Employees ... ... ... | 600,000 |
| Passengers carried (1949) ... | 992,782,000 |
| Freight carried (tons) ... ... | 279,501,000 |

The Railway Executive is responsible for administering, maintaining and operating the British railways. It also manages and operates packet ports like Harwich, Folkestone and Holyhead, as also the connecting shipping services. The Executive consists of a Chairman, four full-time and three part-time members, appointed by the Minister of Transport. The Executive is jointly responsible for the smooth working of the system. Besides, each member is allocated a different department. At present the railways are organized in six regions, which are : London Midland, Western, Southern, Eastern, North Eastern, and Scottish. Each region is under a chief regional officer, who enjoys considerable independent authority, though he is finally responsible to the Railway Executive.

### OPERATIONS OF BRITISH RAILWAYS, DECEMBER 1952

| | |
|---|---|
| Total track miles (standard gauge) ... | 51,703 |
| Route miles (standard gauge, including 924 miles electric) ... ... ... | 19,276 |
| Bridges (of which the longest is Tay Bridge, 2½ miles) ... ... ... ... | 63,104 |
| Locomotives, total number ... ... | 19,149 |
| Carriages, ,, ,, ... ... | 45,969 |
| Restaurant and buffet cars ... ... | 700 |
| Wagons ... ... ... ... | 1,120,118 |

| | |
|---|---|
| Staff, total number ... ... ... | 601,381 |
| Receipts (year 1952) total ... ... | £ 403,357,882 |
| Expenditure (year 1952) total ... ... | £ 363,756,185 |
| Total freight carried (year 1952) tons ... | 284,916,000 |
| Originating passenger journeys (year 1952)... | 988,997,000 |

The Hotels Executive[1] is responsible for railway hotels, refreshment rooms and restaurants and the service of meals and refreshments on trains. It has a Chairman and two full-time members. In 1952, there were 42 hotels, 398 station refreshment rooms and in summer, 628 restaurant and buffet car regular weekday services on trains, under the Hotels Executive.

The Transport Act, 1947 (passed by the Labour Government) was amended by another Act, by the Conservative Government on 6th May 1953. By this new Act the Railway Executive was abolished as from 1st October 1953. A provision is made for the reorganization of the railway operation under a scheme to be prepared by the British Transport Commission and submitted to the Ministry of Transport and Civil Aviation within 12 months. The Railway Executive is to be replaced by newly created area authorities.

We shall conclude this section on British railways by quoting Dr. K. G. Fenelon. He says that, "the railways still remain the backbone of inland transport facilities in Great Britain, despite the progress which has been made by mechanical road transport since the war. They are especially well suited for the carriage of heavy traffic, raw materials, bulky articles or low-grade commodities at the one end of the scale and for the rapid transit of small lots over long distances at the other. The coal trade and most other 'heavy' industries are essentially dependent on the railways, since their products could not be conveyed by road over long distances or in large quantities. Railways can also cater more effectively for intensive passenger services and for long distance travel, both passenger and goods. The high speed which is possible on the special and carefully safeguarded permanent way of the railways gives them a great advantage over road transport on the long haul."[1]

---

[1] This Executive was abolished as from 1.10.53.
See also British Transport Commission in this Chapter.

## BRITISH SHIPPING AND SHIPBUILDING[2]

One of the important factors making for Britain's economic supremacy has been her ownership of shipping. It has helped her not only to carry her own commerce and that of her dominions and even a greater part of the world but also to provide her with a source of income to the owners of the shipping and to help in building up a favourable balance of invisible credits. In 1932 the British portion of the world's steam and motor vessels was about 30 per cent of the total tonnage. The importance of British shipping to her other industries cannot be overemphasized. It was said of her on the eve of the world depression that "Great Britain, with an island population of 45,000,000 provides only sufficient domestic foodstuffs to feed this population for two days out of five for bread and two out of seven for all foodstuffs." She has always had to export coal, iron and steel, and other manufactured goods to pay for these vital imports. British shipping has not only helped the smooth flow of these huge exports and imports, but it has provided a most vital source of income to pay for the excess of her commodity imports over exports.

Shipbuilding is one of the oldest industries of Great Britain, without which she could not have assumed a commanding position in international trade, as well as in world politics. Shipbuilding has been encouraged from the earliest times. The Navigation Acts of 1651 and 1661 prohibited the import of goods from other countries into England, Ireland, or other colonies, except in English owned and English operated ships. This gave a tremendous fillip to ship construction activity in great Britain. Apart from the fact of the success or otherwise of this policy, such Acts indicated the importance of shipping in British affairs.

---

[1] British Railways Since the War, p. 39.

[2] Also see, M. E. D. Vol. I, pp. 200-01.

Till the middle of the nineteenth century, world commerce, was carried in wooden sailing vessels. The wooden construction of ships was a serious limitation on the development of commerce, which was tending to grow faster than the wooden vessels could carry. There were hardly any improvements in shipping construction. Timber was limited in relation to the demand for it and certain important shipbuilding countries including, Great Britain, were inadequately supplied with the same. Wooden vessels were necessarily smaller in size, and slow in speed. The replacement of wood by iron and later by steel marked a great stride in the progress of shipping and commerce. The new type of vessels were larger, safer and durable. They also hastened the advent of power transportation. The transformation from wood to iron and steel and from wind to steam was a very gradual process. Steam-driven vessel was successfully launched when in 1838 the *Great Western* crossed the Atlantic on steam power.

There was a short time when the U.S.A. was holding decided advantages over Great Britain in respect of shipping and shipbuilding. However, with the change-over to steel and steam, the advantages passed on to Great Britain. She possessed obvious advantages of developed metal industry and other services which could efficiently cater for the needs of her shipbuilders. This advantage she possesses even today. From 1924-29, the annual average construction of merchant vessels in the world was 2,672,400 tons. More than 50 per cent of this tonnage was built in British shipyards.

### MERCANTILE SHIPPING OF THE WORLD

| | | | (000 Omitted) | |
|---|---|---|---|---|
| | 1934 | | 1938 | |
| Countries | No. | Tons | No. | Tons |
| Great Britain ... | 7,469 | 17,734 | 6,722 | 17,900 |
| British Dominions ... | 2,498 | 3,106 | 2,255 | 3,100 |
| France ... | 1,567 | 3,298 | 1,231 | 2,900 |
| Germany ... | 2,043 | 3,960 | 2,459 | 4,500 |
| Japan ... | 1,949 | 4,072 | 2,337 | 5,600 |
| Norway ... | 1,908 | 3,981 | 1,987 | 4,800 |
| U.S.A. ... | 3,045 | 10,354 | 3,000 | 11,400 |
| World Total ... | 30,997 | 65,576 | 29,763 | 68,400 |

### OCEAN-GOING SHIPPING TONNAGE IN 1948

*(in millions of gross tons)*

| | | | |
|---|---|---|---|
| U.S.A. ... | 26.2 | U.S.S.R. ... | 1.3 |
| British Commonwealth | 18.7 | Greece ... | 1.3 |
| Norway ... | 4.1 | Japan ... | 1.1 |
| Panama ... | 2.7 | Denmark ... | 1.0 |
| Netherlands ... | 2.6 | Spain ... | 0.9 |
| France ... | 2.5 | Brazil ... | 0.7 |
| Italy ... | 2.0 | Argentina ... | 0.6 |
| Sweden ... | 1.8 | Rest of the world ... | 5.1 |

Total for World ... ... ... 73.6

Source : Enke & Salera, International Economics, p. 314.

Following the first World War there were serious structural maladjustments in the British shipbuilding industry. This was the natural consequence of the over-expansion during the war. And like other capital goods industries which depend upon a derived demand, there ensued in shipbuilding, too, maladjustment, which inevitably follows a sudden contraction of demand. The war had greatly increased the capacity of the British shipbuilding industry and the wartime demand for ships had suddenly come to an end. All was not well with this industry even after 1924, in which year it could be legitimately said that the post-war slump had come to an end. The temporary fillip given to British heavy industry, including shipbuilding, by the French occupation of the Ruhr, was now over, and there was witnessed in the shipbuilding industry a worse kind of redundancy. This position remained unchanged until the outbreak of the second World War. Between 1924-1939, the shipbuilding industry lost 82,000 workers, *i.e.*, by about 32 per cent of the normal complement in the industry. This, no doubt, brought down the figure of unemployment for the industry; but even then, in the most 'prosperous' pre-war year of 1937, unemployment in shipbuilding industry was as high as 23.8 per cent.

Once again with the coming of war the industry expanded quickly and it was one of the industries to which workers from other industries had to be shifted for war purposes. Shipbuilding is a peculiar industry which, if in private hands, requires the stimulus of some or other form of subsidy. A subsidy, it is well known, raises both political and economic problems. Shipbuilding will remain a depressed industry if it is not helped by speeding up naval construction or by resort to subsidies. Between the two wars when the first alternative was not available, Great Britain had on more than one occasion to resort to the latter.

In spite of a strong case for nationalization and of numerous protagonists of the same, British shipping is not nationalized. However, when the railways were taken over some cross-channel shipping services were brought under the British Transport Commission. The state, however, through its Acts controls shipping for purposes of safety, etc.

In 1952, the U.K. had a merchant shipping fleet of 18½ million gross tons (vessels of over 100 *g.t.*) With the total world shipping at 90 million tons, British shipping constitutes 21 per cent of the same. And though the U.S.A. has a larger registered tonnage, half of the latter's vessels are Government-owned and withdrawn to reserve fleet. Thus, the U.K. has the largest merchant navy in active employment. The capital value of this fleet is estimated at £ 2000 million. The mercantile marine of the U.K. carries nearly 40 per cent of the world's seaborne traffic of goods and passengers. The shipbuilding services earn for the U.K. a major part of her annual invisible income. In 1952, the total invisible income of the U.K. was £261 million, of which the net invisible income from shipping was £108 million. This is, therefore, an important source of foreign exchange earning to the country.

The shipping tonnage of 18½ millions comprises of nearly 6,000 ships. This includes the largest privately owned tanker (oil) fleet in the world. The world tanker fleet is about 20 million tons, of which the British tanker fleet consists of 4.5 million tons. In recent years there has been a growth in the size of the ships, including tankers. Other significant trends are towards oil firing instead of steam firing and the replacement of steamships by motor vessels. The latest development in shipping is the use of gas turbine engines in ships.

The British mercantile shipping has been known for high standards of efficiency and service and being chiefly engaged in foreign trade, it has done its part in promoting wider, freer multilateral trade. The British passenger service also has the reputation of efficient organization of service over a world-wide network of routes.

## British Shipping Lines

The following are some of the well-known British shipping lines :

The Cunard White Star Ltd. operates the North Atlantic route. It owns the world's two largest liners, *viz.*, the *Queen*

*Elizabeth* (83,000 gross tons) and the *Queen Mary* (81,000 gross tons).

Furness, Withy & Co. Ltd. This is a predominantly liner organization and operates North Pacific-U.K. route, the Australia and New Zealand Route, as also the North, South and Central America routes.

Union-Castle Mail Steamship Co. Ltd. This line has been operating over 100 years providing the chief link with South and East Africa for passengers and mail.

Peninsular and Oriental Steam Navigation Co. Ltd. This famous P & O line has operated on Far East routes since the opening of the Suez Canal in 1869. At that time it had a well-established service from the U.K. to Spain and Portugal. Its large fleet now operates on the India, China and Australia routes.

The Orient Line operates the U.K.-Australia route through the Suez Canal. The Ellerman Line operates service to South and East Africa, and to the Mediterranean, North America and the Far East. The Elder Dempster Lines was formerly famous for the transport of tropical fruit. It now operates mail, passenger and cargo services to South and West Africa. The Blue Star Line is known for its pioneer work in meat transport from South America and Australasia by refrigerated ships.

The two main tanker companies of the U.K. are the Shell Fleet and the British Tanker Company Ltd. The former is an associate of the Shell Transport and Trading Co. and has nearly 570 vessels, totalling over 6 million tons (d.w.), and the latter is a shipping subsidiary of the Anglo-Iranian Oil Company Limited. It has 152 ships with over 32,000 tons d.w.

The U.K. has also a large whaling fleet and a fleet of eight cable ships, looking after a 20,000-mile section of submarine cable. The merchant ships of the U.K. also participate in the international weather patrols by making voluntary observations in the course of normal voyages.

## SHIPPING ORGANIZATIONS

There are a number of shipping organizations and groupings which are concerned with regulating the activities and interests of the industry and to deal with common problems.

The Corporation of Lloyd's founded in the seventeenth century is a world-famous organization specializing in marine insurance.

The Lloyd's Register of Shipping surveys and classifies ships with special attention to their safety and operational efficiency. Any underwriter would be prepared to accept marine risk if there is a satisfactory Lloyd's classification.

The representative bodies of shipowners generally are the Chamber of Shipping, and the Liverpool Steamship Owners' Association. A body known as the General Council of British Shipping co-ordinates the views of the shipping industry as a whole on all matters of major policy.

There are employers' organizations also which are concerned with labour relations and the regulation of employment through the Merchant Navy (this is a name given to the whole organization, *viz.*, ships, owners, officers and men). These are the Shipping Federation and the Employers' Association of the Port of Liverpool.

The various seafarers' organizations are the Mercantile Marine Service Association, the Navigators' and Engineer Officers' Union, the Marine Engineers' Association, the Amalgamated Engineering Union, the Radio Officers' Union, and the National Union of Seamen. The National Maritime Board comprises of representatives of the shipowners' and seafarers' organizations. It is responsible for all negotiations of wages and conditions of service in the Merchant Navy.

The shipping companies of the U.K. are members of a series of 'shipping conferences'. These are either British or international shipping conferences. Their purpose is to secure standardization and stability of rates, and to maintain frequency and regularity of services. A conference is based on the essential principle of establishing a common tariff of freight rates or passenger fares from each port of departure. There are frequent meetings of members to review or revise existing rates, or to compile new ones. The conferences are sometimes connected by rate agreements.

## SHIPPING AND GOVERNMENT

The Ministry of Transport and Civil Aviation is the Government department chiefly concerned with merchant shipping. It concerns itself with safety of ships and voyages. It is also responsible for holding examinations and issuing certificates of competency to masters, navigation and engineer officers, deck ratings and ships', cooks, etc. It runs the Mercantile Marine Offices at the U.K. ports, where crews are signed on. These offices also maintain registers of shipping and seamen. It is also concerned with the welfare of seamen and the Coast Guard Service.

## PORTS, DOCKS & HARBOURS

There are over 300 ports in the U.K. Of these the largest are :—1. London, 2. Southampton, 3. Liverpool, 4. Newcastle-upon-Tyne, 5. Glasgow, 6. Belfast, 7. Hull, 8. Swansea, 9. Manchester, 10. Bristol, 11. Cardiff and 12. Middlesbrough. Some of the ports which were formerly owned by the railways are now owned by the British Transport Commission. Some of these are Southampton (docks only), Hull, Swansea, Cardiff and Middlesbrough (docks only). Some ports are owned and controlled by public trusts on which the users of the ports, such as shippers, importers, shipping companies and Government Departments and local authorities are represented. For example, London is controlled by the Port of London Authority, Liverpool by the Mercy Docks and Harbour Board, Belfast by Belfast Harbour Commissioners, and Glasgow by the Clyde Navigation Trust. Certain ports, including Bristol, are owned by the town or city council. About 100 ports are owned privately. The most important among these is Manchester, which is owned by the Manchester Ship Canal Company. However, the Manchester City Council has a considerable control over the management of the port, as it appoints 11 out of 21 directors of the company.

## CIVIL AVIATION IN THE UNITED KINGDOM

A new ministry called the Ministry of Civil Aviation was set up in 1945. The function of this ministry is to formulate and direct policies for the development of civil aviation in Great Britain, to plan British air services and to look after the interests of private and charter flying by British companies. The Ministry of Supply has been, however, delegated with the functions of supervision of design, development and production of civil aircraft. The Ministry of Supply is also responsible for the provision of all Service aircraft. It also conducts research and development to meet civil and Service needs. In October 1953, the two ministries of transport and civil aviation were amalgamated to form a new ministry, *viz.*, the Ministry of Transport and Civil Aviation.

### THE FUNCTIONS OF THE MINISTRY

The functions of this ministry are regulatory in character and are defined by the Civil Aviation Act of 1949. It has to register and certify civil aircraft and issue licences to civil crews, personnel, etc. Certificates of Airworthiness are issued by this Ministry. Foreign aircraft plying over the U.K. are also required to be registered and certified as to airworthiness. The Air Safety Board is a standing advisory body of experts. The Board keeps under continuous review the safety needs of British civil aviation. It recommends measures for promoting safety in the operation of British civil aircraft throughout the world and for the provision of an efficient system of ground facilities. The establishment, equipping and maintenance of aerodromes is also the responsibility of this ministry. The U.K. also gives technical, financial and material assistance regarding aerodromes to British dependencies.

The U.K. has numerous government to government agreements on civil aviation with different countries. Such agreements provide for the reciprocal exchange of traffic rights, reciprocal treatment in respect of customs duty on fuel and oil, agreement on fares and for the settlement of disputes. The operation of these international agreements requires at times the use of the usual diplomatic channels and for this purpose, the U.K. has a number of officers attached to her diplomatic missions abroad, as Civil Air Advisers or *Attaché's*. At present, there are six appointments covering the following countries.

1. The U.S.A. and Mexico,
2. France,
3. Egypt, Ethiopia, Iraq, Jordan, the Lebanon, Persia, the Persian Gulf,
4. India and Pakistan,
5. The Phillipine Republic, Thailand, and the Associated States of Viet Nam, Combodia and Laos.
6. Australia.

There are also part-time representatives for Belgium, Greece, Italy, Luxembourg, the Netherlands, Portugal, Spain, and Switzerland.

## AERODROMES

There are about 100 civil aerodromes in the U.K. Of these 34 are directly administered by the Ministry of Transport and Civil Aviation. In addition, there are 50 military aerodromes available for civil use. There are 25 Customs air ports. The main airports used by international scheduled services are :—

for European services : London, Northcolt, Glasgow (Renfrew), Birmingham (Elmdon), Liverpool (Speke), Manchester (Ringway);

for North Atlantic services : London, Prestwick;

for South Atlantic, Middle East, Africa and Far East Services : London.

## THE CORPORATIONS

The aim of the Civil Aviation Act, 1946, was to secure the development of air transport services by Corporations operating under public control and subject to the supervision of the Minister for Civil Aviation. The right to carry passengers and goods for hire and reward between any two places, at least one of which is in the U.K. is reserved by the Act to three State-owned Corporations, *viz.*, the British Overseas Airways Corporation, the British European Airways and the British South American Airways, and their agents and associates. This reservation applies only to scheduled journeys and not to charter flying.

This principle of operating civil air services under Government supervision was adopted in 1924 when a company called the Imperial Airways was established for the development of Empire air communications. Working in close collaboration with the Royal Air Force, the Imperial Airways was responsible for opening the world's first long distance routes to Africa, Australia and Asia. Some of the earliest trans-Atlantic routes also were inaugurated by this company. It, however, paid minor attention to the development of European services. In 1935, four independent air service companies were amalgamated to form the British Airways Limited for developing the European routes.

On the eve of the second World War, the British Overseas Airways Corporation (B.O.A.C.) was started by amalgamating the Imperial Airways and the British Airways. It was thus the first public Corporation in civil aviation. During the war, the BOAC worked in close collaboration with the Royal Air Force to develop the pattern of inter-Commonwealth and inter-Allied air communications. After the war, two new Corporations were started, *viz.*, the British European Airways and the British South American Airways Corporation (B.S.A.A.C.). In 1949, the latter was merged in the BOAC.

In the beginning these Corporations enjoyed almost a monopoly of the U.K. scheduled services but in 1948, some arrangements were introduced by which independent companies could operate some scheduled services. A change in the Government's civil aviation policy was announced in 1952. It expressed the Government's intention not to impair the competitive strength of the two Airways Corporations (the BOAC and the BEA) but to give independent companies more scope and opportunity for participation in scheduled services without increasing the cost of airt ransport to the taxpayer.

The Minister of Transport and Civil Aviation appoints the Boards of Directors of the two Corporations. The Directors are responsible to the Minister, whose instructions and directions they have to carry out. However, the Minister does not interfere in the day-to-day management of the Corporations in which the directors are given maximum freedom consistent with the Government policy and the Minister's responsibility to the Parliament.

The Corporations can issue stock or raise temporary loans for obtaining the necessary capital. The loans of these Corporations are guaranteed by the Treasury. The Civil Aviation Act provided for cash grants to the Corporations, for a period up to 1956, for assisting them in the post-war development of their services and for running certain commercially unattractive services in public interest. The maximum such grant was fixed at £10 million for 1947-48 and £8 million for subsequent years. Every year, these grants are determined by the Minister for Transport and Civil Aviation in consultation with the Treasury. The grants given to these Corporations have totalled £ 36.8 million from 1946 to 31.3.53. In recent years these two Corporations have been together showing deficits, which were as follows:—

| | | |
|---|---|---|
| 1949 | £ 10·6 | million |
| 1950 | £ 9·2 | ,, |
| 1951 | £ 5·5 | ,, |
| 1952 | £ 1·1 | ,, |
| 1953 | £ 2·3 | ,, |

## The BOAC

This Corporation operates routes across Europe and the Mediterranean and serves the Middle East, North West, Central, South and East Africa, the Persian Gulf, Pakistan, India, Ceylon, Burma, Thailand, Malaya, Hong Kong, Japan, Indonesia and Australia. It operates the Central and South African routes in partnership with the Central African Airways, and to Australia in partnership with the Quantas Empire Airways. On the westward side the B.O.A.C. operates routes to Canada and the U.S.A., to the Caribbean and to South America. The B.O.A.C. was the first air service in the world to start jet airliner passenger service. It was inaugurated by flying de Havilland *Comet* between London, Johannesbourg, South Africa in May 1952. In August 1952 the second service was started between London and Colombo. In October 1952 the London-Singapore service was introduced. The fourth jet liner service was started between London and Tokyo in April 1953.

The issued capital of the B.O.A.C. as at 31-3-1953 was £33.2 million, consisting of 2½ and 3 per cent stock guaranteed by the Treasury. The Corporation wholly owns the following subsidiaries : Aden Airways Ltd., Bahamas Airways

Ltd., and the British West Indian Airways. Its partly-owned subsidiaries are Gulf Aviation (Bahrein) Ltd., and the International Aeradio Ltd. The B.O.A.C. is also associated with the British Commonwealth Pacific Airlines (owned by the Governments of Australia, New Zealand and the U.K.) for operating a Commonwealth trans-Pacific service linking Australia and New Zealand with the U.S.A. and Canada. It is also associated with the Tasman Empire Airways (owned by the Governments of New Zealand, Australia and the U.K.) for operating services across the Tasman Sea. The B.O.A.C. has also its associations with the Cyprus Airways, East African Airways Corporation, West African Airways Corporation, Egyptian Aircraft Engineering Company, Iraqi Airways and Malayan Airways.

For the first time in its operations the B.O.A.C. had an over-all surplus of £2,75,000 in 1952. In 1952-53 there was once again a deficit.

## THE B.E.A.

The British European Airways has the largest route network in Europe. The internal services in the U.K. are provided by this line. These are supplemented by independent companies under associate agreement. The Gibralter Airways is the only subsidiary of the B.E.A., which holds 51 per cent shares of the former. It is associated with Aer Lingus, Cyprus Airways, Aerolinee Italiane Internazionali (Alitalia) and the Malta Airlines.

The B.E.A. has an issued capital of 3 and 4½ per cent stock of £16 million. This is guaranteed by the Treasury. The financial year ending 31-3-53 showed a loss of £1.4 million.

## INDEPENDENT AIRLINE COMPANIES

We have mentioned above that agreements exist between the two public Corporations and independent companies by which the latter are associated with the former and allowed to participate in the operation of scheduled services. Such agreements are made on the recommendations of the Air Transport Advisory Council. The existing agreements were given a maximum validity for a period of five years in September 1950. In the case of associate agreements for new routes the period of validity is seven years with extension to ten years in special cases. This is done in order to give the independent companies sufficient long-term security to justify their capital outlay and expansion programme.

The B.O.A.C., the B.E.A., as well as the independent lines engage in charter flying, but it is mainly the sphere of the latter. There are a number of British charter lines which have established successful lines of business since the war. In 1946 these charter companies formed into a representative body, called the British Air Charter Association, whose name was changed in 1951 to British Independent Air Transport Association Ltd. The following are the members of the B.I.A.T.A : Air Charter Ltd., Air Enterprises Ltd., Airways Union Ltd., Birkett Air Services Ltd., Cambrian Air Services Ltd., Eagle Aviation Ltd., Hunting Air Transport Ltd., Jersey Air lines, Lexhams Flying Services Ltd., Morton Air Services Ltd., Oldstead Aircraft, Olley Air Service Ltd., Scottish Aviation Ltd., Skyways Ltd. & Lancashire Aircraft Corporation, Silver City Airways Ltd., Transair Ltd. In addition to these there are a number of other operators who are not members of the B.I.A.T.A.

## ROADS AND ROAD TRANSPORT IN THE U.K.

As compared to its size the U.K. has a greater mileage of metalled roads than any other country. She has over two miles of roads for every square mile of the area and a total of 1,83,658 miles of public highways. The U.K. has also greater density of motor traffic, being about 24 motor vehicles for every mile of road. In 1950, 11 per cent of the national income was spent on road transport and travel and between

3 and 4 per cent was spent on other forms of internal transport. In the same year some £40 million were spent on goods haulage, £210 million on transport by bus, and £340 million on private and business motoring. Road transport is now the third largest industry in the U.K. (*i.e.* next only to agriculture and building) having about 1⅓ million persons engaged in making, repairing, servicing and driving the vehicles used in maintaining the road system. Road transport absorbs probably about 8-10 per cent of the country's industrial potential as against about 3 per cent by the railways.

The total number of vehicles on the roads rose from 30,84,896 in 1938 to 41,07,652 in 1949. Similarly, the U.K.'s export of motor vehicles and chassis reached £ 1,41,373,885 in 1949 from £12,918,856 in 1938. These figures are continuously rising. The services provided by road transport cost the country about £1000 million a year.

In 1915 the Ministry of Transport was created with the object of improving the means and facilities for locomotion and transport. These include railways, light railways, tramways, canals and inland navigation, roads, bridges, ferries and the vehicles and traffic thereon, harbours, docks, etc. During the last war shipping also was brought under the purview of this Ministry. Since the Ministry came into existence a volume of legislation affecting roads and transport has been enacted. The Ministry is headed by the Minister of Transport who is a senior member of the Government.

The Ministry as such does very little of the actual work on the roads. It employs other highway authorities to do this work as the Ministry's agents on trunk roads. However, the Minister of Transport himself is the Highway Authority for some 8,189 miles of the trunk roads. Road construction work is also done by contract and the larger the work is, the more likely it is to be done by contract.

The roads in the United Kingdom are, for the purposes of administration, including financial support, divided into

5 categories. There are trunk roads (8,189 miles) which are the principal traffic routes. The Class I, II and III are of descending degrees of importance. Class I roads are identified by the letter "A" and Class II by the letter "B" prefixed to the route numbers. There are 19,583 miles of roads in Class I, 17,694 miles in Class II, 48,584 miles in Class III, and the remaining 89,608 miles of roadways are unclassified.

The Government pays the whole cost of maintenance and improvement of the trunk roads, and the Ministry of Transport pay their agent authorities 5 to 6 per cent for doing the work for them. On Class I roads, the Government pays 75 per cent., on Class II 60 per cent., and on the Class III roads 50 per cent. The Government contributes nothing towards unclassified roads. For the non-trunk roads, the responsibility rests in the Highway Authority, which may be County Councils, County Boroughs, Municipal Boroughs or Urban Districts. Theoretically, these can maintain and improve the roads under their jurisdiction, in such ways as they think fit, but in practice they do discuss with the County Engineer any large scheme of road surfacing which they may contemplate. The Ministry of Transport also has some control in the matter if these bodies want a grant from theMinistry.

Whereas the Department is responsible to a Minister, the engineers of other Highway Authorities are responsible to the Highway Committees and the Ministry, by reason of financial contributions, has usually an indirect control over what a Highway Authority does to its roads. The Highway Authorities send plans, estimates, and details of their works to the Ministry for approval. All these must be examined. Often alterations are required and these are effected either by correspondence or discussion. The Department tries to get uniform standards adopted, and also suggests and advises Highway Authorities on their engineering layouts and construction and on their specifications.

All proposals for new roads are submitted and where there is any substantial opposition to a proposed new road or widening, the Minister will hold a public enquiry, which is taken by one of the engineers of the Department, except in cases where the line of a new trunk road is concerned, when some outside person holds the enquiry.

The Government exercises control over the important highways through the medium of finance. The local rates suffice only for about a third of the cost of maintaining the classified roads. The rest of the expenditure is to be met from the Road Fund. Before 1936, the revenue from the motor vehicle taxes used to be paid into this Fund. From that year, however, all such revenue is first credited to the National Exchequer. Money is voted annually to the Road Fund through the Civil Estimates of the budget. The Minister of Transport administrates the Road Fund.

In the inter-war period a large-scale road improvement programme was started in the U.K. New bridges and arterial roads and by-passes were built and old roads were straightened and widened. When the second World War began, this programme was suspended. In 1946, a ten-year plan was announced by the Ministry, which laid down the following policy :

(1) Promotion of safety on the highways.

(2) Improvements to assist development areas in particular (*i.e.,* areas scheduled for new industrial development) and industrial development generally, including better access to ports and markets.

(3) Improved through communications.

(4) Rehabilitation and improvement of towns and countryside, and re-development of devastated areas.

(5) Improvement of access between the home and workshop or office and reduction of traffic congestion; and

(6) in the country areas, promotion of the efficiency of agriculture.

Immediate plans included certain major schemes like the suspension bridge over the Severn (contemplated to be the largest of its kind in Europe), a tunnel under the Tyne, one also under the lower Thames. Long-term plans provided for the reconstruction of the main trunk roads and the building of new roads reserved for motor traffic. In May 1949, a Special Roads Act was enacted authorizing the provision of roads reserved for special classes of traffic. Lack of funds has made it impossible to incur expenditure on the construction of motorways but nevertheless planning in these is proceeding.

## THE ROAD HAULAGE EXECUTIVE

The Transport Act, 1947 nationalized long-distance haulage of goods by road. The provisions of the Act were administered by the Road Haulage Executive. It completed by 1951 the first stage of acquisition of the long-distance (*i.e.*, whose journeys exceed 40 miles or 25 miles from the operating centre) road haulage undertakings in the country.

The Executive consists of a chairman, four full-time and two part-time members. The country, four this purpose, is divided into eight geographical divisions, each division being the operational responsibility of a divisional manager. Divisions are divided into 3-5 districts under the control of district managers. Districts are further divided into 5-10 groups, with a group manager, each, who has about 125 vehicles under his control. It was claimed that the Organization kept intact the personal relationship that has always existed between the road haulier and his customer. Besides the 8 divisions there is a special traffic division handling certain types of freight and is independent of geographical area.

By the end of 1952 the Road Haulage Executive had acquired 3,774 undertakings and was employing 72,579 people and operating 39,320 motor vehicles and 654 horse-drawn vehicles.

The Road Haulage Executive was abolished from 1st October 1953. The Transport Act of 1947 was amended in 1953 to bring about denationalization of transport services. This Executive was required to dispose of its road haulage undertaking. A six-member Disposal Board has been appointed to supervise this disposal. Pending disposal the former activities of the Executive are carried on by a board of management called the British Road Services.

## LONDON TRANSPORT

London has a transport system dating from 1829 when the first omnibus, which was horse-drawn, appeared on the streets. Horse-drawn trams arrived in 1861. The Metropolitan underground steam railway was started in 1863. The Tower Subway constructed in 1870 was a distinct improvement on the earlier venture. This was shaped like a hollow tube and was entirely subterranean. It is the world's first tube railway. In 1890, the world's first electric tubeway was started. Gradually, horse-drawn buses and trams ceased altogether and with the use of petrol and electricity buses and tube railways grew into a vast net-work of London's transport system. In 1933, the whole of this system was taken over by the London Transport Board, a public corporation. In 1948, it was taken over by the London Transport Executive.

### THE LONDON TRANSPORT EXECUTIVE

This statutory body is responsible for operating passenger road and rail services in the London area with the exception of the main-line railways and certain suburban services which are managed by the Railway Executive. The Executive is headed by a chairman and has six members of whom two are part-time.

The London Transport Executive which is responsible for the smooth running of London transport has to operate a vast undertaking, consisting of both road and rail services. It serves an area of 2,000 square miles, extending over an average distance of 25 miles from the heart of London. The total population of the area served by this body comes to nearly 10 million. The London Transport trains operate over 248 miles, of which one-third is underground. The underground includes the longest tube tunnel in the world, 17¼ miles. The London Transport has 277 stations.

Diesel buses travel over a total route length of 2,758 miles coaches over 649 miles, trolleybuses using electricity 255 miles, and trams 117 single track miles. In December 1951, the London Transport Executive owned 3,998 railway coaches, 7,694 buses and coaches, 1,763 trolleybuses and 718 trams, making a total of 14,173 passenger vehicles. The total staff of the London Transport was 99,279 including 10,575 women. Over 11 million passenger journeys take place by the London Transport every day. These are phenomenal figures and have increased from about 2 million passenger journeys per day in 1938-39. To meet the challenge of this expansion, the British Transport Commission put forward a plan for extensive developments in the London railway system, at a cost of approximately £340 million. This plan would take 20-30 years to complete. The plan envisages, among other things, the construction of new tubes, the electrification of steam suburban railways, and the abolition of trams by substituting bus routes. This plan has already started working and in 1952 the removal of all London trams was completed and some extensions were made to the underground railways.

## THE BRITISH TRANSPORT COMMISSION

In closing this description of the transport system in the United Kingdom it is necessary to say a few words about the British Transport Commission. It was established as a public corporation by the Transport Act of 1947. It was given wide powers to run the greater part of public transport in Great Britain. Although the Commission is the largest single transport undertaking in the country it does not possess the complete transport monopoly as is often supposed. Six executives were appointed to operate the system. These were :—

1. The Railway Executive,
2. The Road Haulage Executive,
3. The Road Passenger Executive,
4. The Hotels Executive,
5. The London Transport Executive, and
6. The Docks and Inland Waterways Executive.

The Conservative Government amended the Transport Act of 1947 in May 1953. This amending Act modified both the composition and functions of the Commission. This new Act was a denationalization measure. The Road Passenger Executive was already abolished in October 1952. The other executives, except the London Transport Executive, were abolished as from 1st October 1953. The amending Act provided for the replacement of the Railway Executive by newly created area authorities. A new Board of Management replaced the Docks and Inland Waterways Executive. The Hotels Executive was replaced by a Hotels and Catering Services Committee to be known as British Hotels and Catering Services.

The British Transport Commission has now 14 members excluding the chairman. The 14 members can be part-time. The entire railway system of the country, as also the formerly railway-owned docks, waterways and canals, passed into the control of the Commission on 1st January 1948. It also began to acquire from that date road haulage undertakings engaged in long-distance traffic. Traders carrying their own goods in their own vehicles were, however, excepted. Before denationalization about one-fifth of the country's road passenger transport outside London came under the

British Transport Commission. The London Passenger Transport Board was also vested in the Commission.

The work of the Commission involved the employment of about 888,000% and the gross receipt of over £620 million (1952).

In order to protect the interests of the users of the nationalized transport services, and to afford them opportunity for constructive criticism, committees representing the consumer interests were set up. The members of these consultative committees were appointed by the Minister of Transport and Civil Aviation in consultation with the interests concerned to represent commerce, industry, labour and local authorities. Such committees would have an independent chairman and representatives of the British Transport Commission. There is a Central Transport Consultative Committee and eleven area committees which cover the whole country.

# TRANSPORT IN THE U.S.S.R.

## RAILWAYS IN SOVIET RUSSIA

The railway development in Russia started in 1838, when a small line connecting St. Petersburg with its suburbs was built. The pace of railway construction proceeded unevenly till the Revolution. In 1914, there were 79,590 kilometers of railway lines in Russia. This figure includes the railway lines in Finland and also the Chinese Eastern Railway. In Csarist Russia there was not a definite policy towards railways. Railway construction was done sometimes by the state and sometimes by private enterprise. During 1914-17 the Government held 67% of the railways, and the balance belonged to 8 large companies. Unsound planning during the Csarist regime has resulted in several defects in the Russian railways and even to this day they are being felt.

In the first World War, Russia suffered heavy lossses on account of badly planned and inadequate rail transport. The greatest defect of Russian railways was the absence of lateral lines running parallel to the front. In Germany, however, the railway ran along the entire frontier from Memel to Tilsit and Beiten. The Russian railway reached the border only at 5 points, making it well-nigh impossible to shift troops and materials from one point to another. The war emphasized the need for urgent co-ordination and co-operation between the Railway and War Ministries. A special Railway Board was set up, but its work was hampered by dual authority and often contradictory instructions.

Meanwhile, the fuel situation was becoming difficult. Russia had lost her coal imports from the Baltic ports and Dombrovo. Now all coal supplies had to come from the Donetz basin. During the war, new rail lines were constructed by private companies under the guise of war necessity. There was such a confusion in railway construction that some strategically important lines were given up and some very unimportant construction projects were given priority. By the time of the Revolution, the railway situation in Russia was in a state of utter confusion and chaos.

## AFTER THE REVOLUTION

During the war, Russia had to give up some railways due to secession of a number of border countries in the West. Again, the Chinese Eastern Railway had also to be given up. Soviet Russia started, therefore, with a railway network of about 36,560 miles. In the Civil War that followed, beside considerable other damage, 4,000 railway bridges, 5,000 railway buildings and 400 water towers were destroyed. The Soviet Government with the co-operation of the railway men took a number of measures by which it was possible by 1926-27 for all the railway indices to exceed the 1913 level.

| Year | Daily loadings (*in* 000'*s of wagons*) | Freight carried (*in* 000'*s of millions of ton-kilometres*) | Passenger Service (*in* 000'*s of millions of passenger kilometres*) |
|---|---|---|---|
| 1913 ... | 27 | 65.7 | 25.2 |
| 1921-1922 ... | 9.6 | 16.1 | ... |
| 1922-1923 ... | 11.7 | 23.5 | 13.9 |
| 1923-1924 ... | 13.5 | 33.7 | 15.4 |
| 1924-1925 ... | 17.4 | 24.4 | 19.0 |
| 1925-1926 ... | 24.0 | 68.9 | 23.4 |

## DURING THE PLAN ERA

The restoration of railway transport was remarkable specially in view of the grave economic situation through which this restoration was brought about. The first Five Year Plan emphasized the development of the heavy industry first and as such it was not possible to appropriate large sums for railway development. In 1931, a plan was drawn up for a thorough reconstruction of the railway system. It was a sweeping plan and it provided for the electrification of the railways, the introduction of powerful locomotives, large freight cars, automatic coupling, automatic blocking and signalling, the reconstruction of the track and the mechanisation of loading and unloading operations. As a result of the reorganisation on these lines, wagon loadings rose from 55,000 to 77,000 daily, (*i.e.* by 28%) between February 1935 and June 1935. The progress of the railways was accelerated by scientific study as well as the introduction of the Stakhonovite movement in the railways. This progress was continued until 1941. By that time, it is claimed, that the Soviet railways carried 2.6 times more freight per kilometre of line than the United States and 2.9 times more than the German lines. The passenger service was 1.8 times greater than in Germany and 2.3 times that of the U.S.A. For all other indices, the Soviet Union was coming close to the level of the United States and exceeded Germany in the main.

Soviet Union at first completed the lines begun in the first World War and which were considered to be of economic and strategic importance, *e.g.*, the Murmansk Line, the Kazan-Sverdlovsk Line. Several important new constructions were undertaken, *e.g.*, a secondary track was laid on the Great Trans-Siberian Railway up to Vladivostok; lateral lines were constructed along the Western Dvina and the Dnieper; secondary tracks were laid on the railway lines running near the Western borders. These lines are important in the defence of the country. As industrial development of the Ural region proceeded, an urgent need for railway construction was felt. The newly built Kuzbas-Magnitogorsk Railway made possible the carrying of coal from the Kuzbas to the Urals and the return of Urals' iron ore to the Kuzbas. Freight costs were thereby much reduced and the building of iron and steel mills at both ends of the line was made practicable. This new line and the development of the iron and steel industry in the east greatly aided the rapid expansion of the manufacture of armaments and munitions during the war. The Turkestan Siberian Line, built in Soviet times provided an outlet for Siberian grain to the cotton-growing districts of Central Asia.

In spite of the great strides made on the technical side of railway transport, it is admitted that the railways continued for a long time to be the weak spot in the Socialist state. But since 1935, things changed radically.

## DURING THE WAR

The advance of enemy troops in the summer of 1941 put a tremendous pressure on Soviet railways. "Thousands of trains carrying troops and armaments streamed to the front, while in the opposite direction to the east, rushed thousands of trains loaded with dismantled industrial equipment, raw materials and other property, and with the population being evacuated from the zone of hostilities. The railwaymen had to dismantle and dispatch to the interior of the country vast quantities of track and railway equipment, carry wounded from the front and bring troops and arms to the army in the field."

As the enemy advanced, the length of the available railway lines was very much reduced and the railwaymen had to repair and lay new tracks in the face of enemy fire. One such new line of great strategic importance was Obozerskaya-Soroki line which enabled troops on the Murmansk line, who were cut off from Leningrad, to be fed and supplied with arms. Similarly, a new line which was laid between

Akhtuba and Baskunchak proved an immense help to the heroic defenders of Stalingrad. Other new lines like the Saratov-Kamyshino-Panshino line on the right bank of the Volga, the Kislyar-Astrakhan line and the Kotlas-Vorkuta line also helped bring victory on various fronts. With the continuous advance of the German troops, all sorts of circuitous routes had to be devised to tranship essential supplies like oil, etc., to troops. Paying compliments to the railwaymen, Soviet President Kalinin observes, "Our railwaymen have accomplished a titanic job. They have moved for thousands of kilometres from the west to the east mountains of equipment, supplies and grain and millions of people escaping from the barbarians. The country will never forget the service and it highly appreciates the work accomplished by railwaymen."

The war significantly changed the economic relations between the various parts of Soviet Russia, and with the transfer of industry to the Urals, Siberia and the Volga basin the direction of freight shipments also considerably changed. When the Donetz basin was temporarily lost to the enemy, coal had to be shipped over thousands of miles from the Kuznetsk and Karaganda fields. This naturally gave rise to the problem of wagons returning empty in the opposite direction.

With the shift in industrial importance to the Urals due to the fast growing metallurgical and war industries in the east, several railway lines, which formerly were of a secondary importance, now became major arteries. The war meant a rapid shift in the order of priorities. Top priorities were naturally given to urgent freights like army supplies, fuels, raw materials of war industry, foodstuffs and materials and equipment for the restoration of railways. All this meant a thorough reorganisation and replanning of train schedules and freight classification. It called for intensive work on the part of the railwaymen, who stood admirably the challenge involved in the situation.

The railways experienced severe labour shortage during the war and hence a large number of women had to be enlisted on all kinds of jobs on the railways. Most railwaymen were given *universal* training by which combining of various duties was made possible. The combining of duties originated in the days of the defence of Stalingrad, when railwaymen had suddenly to replace wounded officials by others. While, the railwaymen were called upon to perform increasingly heavy and responsible tasks, their welfare was being attended to by the railwaymen's trade union. It is the latter's duty to see that their conditions of work improve side by side with the technical improvements advanced by the Ministry of Railways.

The Stakhanov method has been largely responsible for the technical advancement of the Soviet railways. During the war the main tasks of the railways were to increase to the maximum the speed of the military trains and secondly, to effect the utmost economy in fuel. While during World War I, military trains covered an average daily distance of about 250 miles, the military trains attained an average between 500-625 miles per day during the defence of Moscow and Rostov in World War II. Several locomotive engineers helped to effect fuel economy by devising various methods. Again 'heavy trains' were introduced which carried one and a half or twice the number of cars in an ordinary freight train. By careful planning and keeping the tracks clear, the need of two locomotives was obviated in several cases. During the war, the railways frequently experienced serious traffic bottlenecks caused by the uneven traffic, frequent change of route and by the necessity of handling unusually large shipments with a smaller network of lines. Special measures were employed to eliminate these bottlenecks. Again, the processes of loading and unloading were accelerated by the introduction of the uniform technological process whereby the organizing and co-ordinating of delivery wagons and their loading and unloading at industrial enterprises is arranged jointly between the railway administration and the enterprises concerned. The main principle underlying a uniform technological process is the co-ordination of operations between the railway line and the industrial establishments, which makes for maximum speed in the handling of freight wagons, as well as for the simplification of a number of operations.

In Soviet Russia, careful attention is paid to scientific research and inventions on railways. This is so because railways use so many different materials and products, *e.g.*, railways require 25% of all metal and fuel consumed in the country. Therefore, such developments in metallurgy as the use of stronger metals, greater resistance to rust, development of special alloys, or in the case of fuels, such matters as the higher coefficient of efficiency, improvements in combustion, better mixture of fuel, find wide employment in railways. The problems of water supply are also pertinent for the railways, which in Soviet Russia consume water equal to its consumption in all Russian cities. Similarly, the length of telephone and telegraph lines is almost equal to that under the jurisdiction of the Ministry of Posts & Telegraphs. Thus, the problems of the railways are complex and their solution necessitates the pooling of scientific information from various fields. Rationalisation is being constantly attempted in different branches of the railway activity. Some of the annual Stalin Prizes for outstanding inventions and scientific research have been awarded to railwaymen. The Central Scientific Research Institute of Railway Transport conducts a considerable activity. Similarly, the Academy of Sciences of U.S.S.R. has a special section studying the scientific problems of transport.

## Restoration of the Railways

The restoration of the railways in the liberated areas was a heroic task. Many a time the restoration work had to be done under heavy artillery fire. By October, 1943, more than 10,000 miles of line had been restored, as well as 2,200 miles of secondary track and station sidings, 45 miles of wire were relaid and a large number of stations, roundhouses and other structures rebuilt. Later on the Red Army crossed the Soviet border. Now the work of restoration became difficult because of the difference in the European and Russian gauges. The captured locomotives and wagons were utilised to keep up the railway service in the territory taken by the Red Army. During the last phase of the war, Soviet Russia had to repair the railways of Poland, Rumania, Bulgaria, Hungary, Czechoslovakia and Germany. Soviet railways had to supply the Red Army and the Soviet population and the same wagons had to supply food for Yugoslavia, Poland and even Berlin. These heavy duties were carried out in addition to the repair of bridges, tunnels and the permanent way in the U.S.S.R. and the occupied countries.

## Post-War Five Year Plan

After the Victory, the transport authorities were asked to prepare a five-year plan for restoring the whole system and for its further development and improved equipment. Transport is considered to be a basic factor in the development of Russian agriculture and industry leading to further improvement in the living and cultural standards of the people. The Five Year Plan for 1946-50 allotted 40,100 million roubles as the share of railways in the capital investment of the country. The total capital investment visualized was 2,50,300 million roubles.

The Plan provided for :—

(1) the complete restoration of all the damaged railways in the country employing all new technical devices whether constructional or related to freight and passenger traffic.

(2) the carriage of the extra freights required by the growing industries and agriculture of the country;

(3) increased mechanisation and increased labour productivity on the part of railway employees, and

(4) the building of new railways.

The Plan provided for the complete restoration of 9375 miles of line in the Donetz Coalfield, the Krivoi Rog Iron Field, the Moscow-Donetz, Leningrad-Caucasus and other railways. The work includes the building of 1,800 large and medium bridges on the railways ruined by the enemy. Some of them will be built over the Dnieper, Don, Dniester, Neva, Nieman, Western Dvina, Volkhov and Bug rivers. Some 1,500 railway stations, round-houses, etc., have to be built, while the 7,800 miles of line connecting them are to be built anew or repaired. Several rolling stock repair shops and plants for building rolling stock, which have been destroyed have to be newly constructed. Lastly, houses for railwaymen with a floor space of 59,400,000 sq. ft. are envisaged in the Plan.

The daily wagon loading on Russian railways in 1940 amounted to 1,00,000. It was planned to raise this figure to 1,15,000 in 1950. The freight turnover in 1950 was expected to be 5,32,000 million ton-kilometres, *i.e.*, 28% greater than pre-war. This ambitious programme could be effected only if labour was made 15.17% more productive each year, and if greater mechanisation of loading and unloading operating was made possible. This Five Year Plan provides for 75% mechanisation of all railway work, an improvement of the transport departments of the industrial establishments, and also greater mechanisation of the loading and unloading of river vessels.

The Five Year Plan envisages the replacement of permanent ways and the rolling stock by heavier ways and stock. Nearly half of the total length of line (*i.e.* 31,250 miles) will be renewed with new and heavier rails. The Plan provides for the building of 7,585 steam locomotives, 55 electric locomotives and 865 Diesel locomotives. Freight wagons will be increased by 4,72,500 and passenger coaches by 6,000.

The Diesel locomotives were formerly used only on the Ashkhabad railway. The war brought to notice its great value and the same is undergoing tests on Moscow-Kursk railway. A Diesel engine is capable of a speed of 62 m.p.h. and can carry sufficient fuel for a non-stop run of 500 miles.

The Plan also provides for greater electrification of the railways. It is planned to build a further 5,325 kilometres of electrified line. New electrified lines will be built in Kazakhstan and Altai which connect Stalinsk with Magnitogorok and Kinel.

It is planned to increase the railway traffic from a pre-war average of 4.2 ton kilometres to 4.4 ton kilometre in 1950. This latter figure is claimed to be 2.5 times as much as in the U.S.A. It is expected that in 1950 the railways would carry 2,000 million passengers, giving an average of 11 railway trips per head per year.

The Five Year Plan also envisages introduction of improved technique leading to a number of improvements. There will be greater comfort to passengers, more beautiful stations and improved planning of railway junctions and railway lines through the towns. Plans are being drawn for the Crimean Coastal Railway and for the completion of the Tuapse-Sakhumi-Tbilisi Railway, which will shorten the Moscow-Tbilisi distance by 18 hours.

The Stalingrad Railway Junction will be magnificently planned and it will be connected with an underground railway (19 miles) running through the city. The plan also provides for the building of underground railways in Leningrad and Kiev. The Moscow Metro is to be extended.

Considerable attention is being paid to the problems of traction power and it is intended to reduce the number of steam engines and replace them with Diesel and electric locomotives, which are three to four times more efficient. Research is also being conducted on the possibility of building gas and gas turbine locomotives. Gradually increased use will be made of automatic devices and telephonic and even radio communication with trains. In large sections of the lines centralised traffic control will be introduced. In addition to the regular railway engineers, technicians and workers, all the available scientific sources are being pooled for helping in the work of improving the railways.

## MERCANTILE MARINE IN SOVIET RUSSIA

The U.S.S.R. lies between the Arctic and Pacific Oceans. From the Finnish frontier in the North to Korea in the Far East, the Soviet Union has a sea line of over 20,000 kilometres. The seacoast forms about 70 per cent of the Soviet frontiers, and as such the sea-coasts are an important factor in the economic life, foreign trade and the defence of the country. Oil, timber, grain, coal and other bulky goods are to a considerable extent transported by sea.

The Soviet Union received a poor legacy in respect of mercantile marine after the first World War and the Civil War. It received about 30% of the pre-war tonnage and most of the ships were in a bad condition. The Soviet shipbuilding programme started in 1925 and continued unabated throughout the three Five Year Plans. As shipbuilding was proceeding, the seaports were enlarged and improved. Many operations were mechanised. Specialised ports were constructed, *e.g.,* the timber port at Leningrad, the oil wharves at Taupse, the ore loading wharves at Azovstal and Kamyshburun, the timber quays at Murmansk and Novorossisk and the elevators at Kherson and Marinpol. By 1939, the Soviet merchant fleet had been enlarged to six times that inherited from old Russia. During the war, the Soviet merchantmen, like the airmen of the Civil Air Fleet, participated in various different ways in war jobs. The seaports played an important role during the war. They were required to handle large quantities of goods sent by the Allies and large contingents of troops and equipments.

Certain ports like Murmansk, Odessa and Novorossisk worked under continuous air raids, but the loading and unloading operations were never allowed to be interrupted.

During the war the construction of certain ports like Molotovsk, Petropavlovsk-on-Kamchatka, Vanino and Nakhodka was started; the same are now completed. The ports of Murmansk, Vladivostok, Archangelsk, Krasnovodsk and Baku were greatly extended and mechanised for the purposes of various operations.

## FUTURE PROSPECTS OF THE SOVIET MERCANTILE MARINE

Under the Five Year Plan of 1946-50, the seaborne freights for 1950 are expected to be more than double those of the pre-war day and for this purpose new vessels totalling 6,00,000 tons will be built. Ships of new designs are being constructed so that they would be commissioned for both coastal and ocean voyages. For long distance services between the U.S.S.R. and Africa, India, Australia and America, a number of 12,000-ton liners with a fast speed will be built.

During the war several seaports in the south and the Baltic were destroyed by the enemy. This Five Year Plan provides for the rebuilding of the Baltic, Azov and Black Sea ports and also for the construction of new ports in the Far East. The mechanisation of loading and unloading operations in all the ports is intended to be greatly extended. As compared with 1940, the number of deep water quays to take modern steamers will be increased by 70% in 1950; similarly, the capacity of repair and graving docks in 1950 will be 2½ times as great as in 1940. It is planned to build 3 new repair yards, 2 new shipyards, one each on the Baltic Sea and the Black Sea. By 1950, the Northern Sea Route will be made a regularly functioning sea lane. This Route has enabled in the last 15 years to open out for economic development several hitherto untouched regions. A Sakhalin

Shipping Trust is started for servicing Northern Sakhalin and the coast of the Sea of Okhotsk. This Trust will have several new ports, of which Maoka is the largest. The merchant fleet programme of this Five Year Plan is designed for the fullest utilisation of the geographical position of the country as an important sea power.

## SOVIET INLAND WATER TRANSPORT

Inland water transport is very important in the development of the Russian State. In the past, almost all settlements were on lake borders and river banks and the rivers with sea connections were the most important trade routes. Russia is a country with immense potentialities in respect of inland waterways. There are 1,08,000 rivers in the Soviet Union and the total navigable length of lakes and rivers is estimated at 5,20,000 kilometres or about 3,25,000 miles. These immense resources have been subjected to carefully planned utilisation and development. During the Civil War, all the ships and barges on the rivers were destroyed by the retreating white armies. In 1918, the freight carried on rivers was only 16 per cent of that of 1913. By 1929, the situation was restored and the way was paved for further development.

| | 1913 | 1929 |
|---|---|---|
| Freight carried in millions of tons ... | 48 | 50 |
| Passengers carried in millions ... ... | 11 | 23 |

The remarkable development of inland transport was made possible by building dams, new canals and reconstructing waterways. Dams were built for power stations on the Volkhov and Svir by which their levels were raised and they were made suitable for navigation. Similarly, by the construction of dams on the Dnieper the water-level was so raised as to eliminate all the rapids, which formerly made the river difficult for navigation. Now the river can be navigated from its upper reaches to the Black Sea. Its importance in Europe is now next only to the Volga and the Danube.

In 1933, the White and Baltic Seas were connected by a canal. In 1937, the Moscow-Volga Canal, which is comparable to the Panama Canal, was completed. It is 128 kilometres long, has 11 locks, 11 dams, 8 power stations and 5 pumping stations. Its work was completed in about 5 years.

Shortly before the second World War another canal was built to connect the Dnieper, the Bug and the Vistula rivers; this canal has connected the Baltic and the Black Seas.

The reconstruction of the inland waterways was also undertaken by revolutionary changes in river ports. These were speedily mechanised and new vessels and tugs were designed for river transport. In 1941 the traffic on Soviet rivers amounted to 74 million tons. The network of inland waterways in regular use is 63,125 miles. It is claimed by the Russians that the U.S.S.R. leads the world's list in inland water traffic and also the length of inland waterways.

During World War II the most important of the Russian waterways were either in the combat area or were used as direct lines of communication to the front. Soon after the war started the Germans reached the Dnieper. In the autumn of 1941 they reached the Volga and in the autumn of 1942 the basins of the Dnieper, Pripet, Desna, Don, Kuban were in their hands. The Russians suffered heavy losses of river fleet. They lost nearly 4,300 steamers, a similar number of barges. About 479 ports including first class ports like Leningrad, Stalingrad and Kiev were destroyed. Shipyards, factories and other installations connected with inland transport were also destroyed, in addition to heavy losses in buildings, canals, etc.

When the war ended navigation was opened on all rivers. The ports were repaired and the chief shipyards were put into operation. By 1946 over half the repairable vessels salvaged from the river beds were made serviceable. Similarly, about half the war-wrecked installations belonging to the Ministry of River Fleet were repaired. In the same year, the White Sea-Baltic Canal was reopened for traffic. The post-war Five Year Plan intended to increase the freight traffic on the rivers by 38% over the pre-war level. The plan envisaged fullest possible mechanisation in ports so that 75% of the loading and unloading would be done by mechanisation and manual labour reduced to the minimum. New power stations and dams would be built on River Kama so as to make it the transport artery of the Urals. Two new power stations on the Volga and the Oka were planned. The Volga-Baltic canal is to be broadened to enable the big Volga vessels to sail up to Leningrad and the White Sea.

The importance of river transport in Siberia and the Far East can hardly be exaggerated. These regions have few railways and hence the Irtysh, Yenisei, Lena, Amur and other rivers will have to carry great quantities of timber, grain, oil, salt, etc. River boats will also sail to the Far North beyond the Arctic Circle supplying food, etc., to gold fields, saw mills and hunting and fishing villages there. The U.S.S.R. has colossal waterways and as the freights are increasing, there are plans to deepen and reconstruct the entire Volga-Baltic system. This will be called the "Greater Volga Scheme". It includes the construction of a number of power stations, the irrigation of the steppes on the Volga, the raising of the level of the Caspian and a canal joining the Volga and the Don.

## AIR TRANSPORT IN SOVIET RUSSIA

A Government Civil Aviation Council was set up by the R.S.F.S.R. in February 1923 to organise the country's air transport. This was the time when all the different means of transport in the country were recovering from the effects of the first World War. At this time the air transport of

Russia was dependent to a very large extent on foreign countries because as yet Russia did not have her own aircraft industry. Foreign built aircraft plied Soviet air-lines.

During the plan era air transport made great strides in Russia. At the end of the first Five Year Plan, Stalin reported that the country had by then her own aircraft industry which could supply aircraft in the required number. The total length of airlines in 1923 was hardly 262 miles and they carried in that year 229 passengers. By 1940, the air-line mileage totalled 89,375 and the air lines carried 3,90,000 passengers and 60,000 tons of freight and mails.

Civil pilots in Soviet Russia have to perform many other tasks besides flying regular air services. They fly at low levels and spray fields threatened with destruction by locusts, etc. Swamp land is sprayed from the air with poisons to destroy malaria-bearing mosquitoes. The pilots of the Soviet Medical Air Service fly anywhere, even into dangerous and unsurveyed territories and are prepared to land anywhere without a landing field. Doctors are taken to the remotest parts of the country or dangerously ill patients are flown to towns by this Service. The airplane plays an important part in many fields of the Soviet economy. It has made possible wintering in the Far North and navigation of the Northern Sea Route. Forests and steppes are protected from fire by the aircraft; it surveys pastures for herds and guides caravans in the deserts. Aircrafts are also used for reconnoitring fishing grounds, carrying bees and other unusual loads and for sowing rice from the air. They photograph the ground for cartographers and surveyors and they accompany scientific and geological expeditions.

## AIR TRANSPORT DURING THE WAR

During the war, there was a tremendous pressure on the civil air fleet, which took its place alongside the Red Army. Air transport was employed for carrying ammunitions to the front, evacuating the wounded to the rear, delivering blood and medical supplies to the front line hospitals, reconnoitring German defences, delivering munitions to the partisans, landing parties of troops and attacking, reconnoitring and aim-correcting air-craft. The civil air fleet played a heroic role throughout the war and specially during the siege of Leningrad,Sevastopol, Stalingrad, Moscow and in several partisan manoeuvres. The civil transport pilots were put on arduous tasks in the interior of the country. As the war industry was constantly growing larger and larger, loads of urgently required materials had to be delivered by air. During the war the difficult air routes between the U.S.S.R. and Alaska were surveyed and operated. The air ports on this route are specially equipped for Arctic conditions. The losses were heavy during the war and this made the training of airmen a matter of great urgency. The Government asked the Civil Air Fleet to help the Red Army Air Forces in training of airmen.

The air lines developed in a big way during the war. In 1945 the Civil Air Fleet carried over twice as many passengers as in 1940. Nevertheless, there are several difficulties connected with the air service today. During their retreat, the Germans destroyed aerodromes and blew up all the airport installations at Leningrad, Kharkov, Kiev, Rostov, Odessa, Lvok, Dniepropetrovsk and other places. Even as the war had not ended some restoration work was undertaken in the Western regions of the U.S.S.R This made possible the establishment of air communication between the important centres of the Ukraine, Byelorussia and the Baltic Republics, important industrial regions on the one hand and Moscow on the other.

Before the war, Soviet air planes flew only on three international routes. At present there are regular air communications with 10 European capitals worked by Soviet aircraft. In the first year after the war was over 200 air lines were opened in the U.S.S.R These are of all-Union importance and carry passengers, freight and mail. There are regular air services between Moscow and the Republican capitals. Aircraft leaving Moscow for any Russian destination except Alma-Ata, reaches the same day. Air planes for Alma-Ata, however, reach on the day following its departure from Moscow. The longest air route in Russia is from Moscow across the Urals, Siberia and the Far East to Khabarovsk. Fast planes make this distance in 36 hours. Even in each Republic there are dozens of services linking the capital of the respective Republic with other places in that region.

## FUTURE PROSPECTS OF SOVIET AIR TRANSPORT

The Five Year Plan for 1946-50 visualizes considerable increases in the number of passengers and the amount of freight and mail carried. Air transport is admirably suited for the freights to be speedily carried over long distances, as such the rate of development of air transport will exceed that of other forms of transport during 1946-1950. This Plan provides for the extension of the air routes to 1,09,375 miles which reckons at 27.5% above the pre-war figure. The Plan provides for not only inter-Republic air communication but also for the development of air transport within each Republic. Sixteen central airports and 20 huge air stations will be constructed during the Plan period. Large funds are being invested for the technical re-equipment of the airlines and also for constructing transport planes adapted for flying both at high and low temperatures and able to make long distance, non-stop flights. Under the new Plan, the Moscow airport will be made capable of handling 100 planes daily and it is intended to make Leningrad one of the world's largest air terminals.

This post-war programme of the Civil Air Fleet also includes the use of large numbers of aircraft to combat insect pests in field and forest, in a much larger measure than before. It is proposed to employ gliders for freight transport in the deserts of central Asia. Helicopters will be widely used in highland, forested and swampy places where it is difficult to construct airfields. They will also be employed for fish, whale and seal scouting as also for combating crop pests. Russia has vast stretches of deserts, the shifting sands of which cause heavy losses by blocking railway lines, roads, irrigation canals and by burying crops. This is a constantly present problem. Methods have now been devised by which seeds of Saksaul and other plants are sown from the air so that this plant life will bind the sands and hold them together. Air services are also to be harnessed for feeding of artificial fertilisers to standing crops from the air. Other tasks which will fall to the lot of the Civil Air Fleet will be aerial-magnetic photography, topographical work, reconnoitring fish and ice, sounding of upper layers of the atmosphere, patrolling the forest, highvoltage electric power transmission lines and rafts of timber being floated down rivers, etc. The Plan also includes a programme for the improvement of the Medical Air Service. Specially equipped air-ambulances and doctors will be on duty day and night at aerodromes awaiting emergency calls.

# TRANSPORT IN GERMANY

## ROAD TRANSPORT IN GERMANY

In 1931 the roads position of Germany was as follows :—

| | |
|---|---|
| State and provincial highways | ... 63,000 k.m. |
| Country and district roads | ... 1,11,000 ,, |
| Municipal roads | ... 40,000 ,, |
| City streets | ... 60,000 ,, |
| Total | ... 2,74,000 ,, |

The financing of highways has been a complex problem in Germany. The reason for this is firstly, that there is large number of administrative bodies which are responsible for the upkeep of the roads, such as, States, provinces, counties, municipalities, etc. Different systems are followed in different parts of Germany in regard to the matters connected with the construction and maintenance of roads, with the result that no uniform policy could be pursued in this matter. By the thirties, however, there was witnessed a tendency towards centralization of road administration, which was put into practical effect by the Nazis later on.

Secondly, Germany experienced before the second World War the difficulty of arriving at any sound method of ascertaining the apportionment of liability in regard to highway finance. There are different users of the roads in Germany. During 1928-29 of the total vehicles using the roads, 26.3 per cent were horse drawn; 60.6 per cent touring cars and motor cycles; and 13.1 per cent lorries, buses, and other heavy motor vehicles. The corresponding tonnage percentages for the above classes of road users, for the same period, were respectively 24.2, 39.0 and 36.8 The difficulties of apportioning the respective liability of the various classes of vehicles were increased on account of the rapid evolution of the motor car. This made it almost impossible to measure the exact amount of wear and tear and to attribute it to the various users.

Thirdly, the authorities experienced considerable financial difficulties in advancing the necessary funds for road work. There was always a great discrepancy between the amounts required for maintenance and construction of roads and the amounts available for the purpose. Generally, the requirements on account of road work were considerably greater than the available funds.

There were in Germany in 1931 6,84,000 motor vehicles, of which 5,23,000 were passenger vehicles and 1,61,000 lorries. There were also 7,92,000 motor-cycles. If motor cycles are included, these figures represent 1 vehicle per 43 of population. Excluding them we have a ratio of 1 vehicle per 94 of population and 146 per 100 square kilometres. These ratios were lower at that time than all other neighbouring western countries. During the depression there was a relative falling off in the annual rate of development. This regression continued up to 1933 after which year, due to taxation relief and other measures of the Nazi Government an upward trend began.

In 1931 the 1,61,000 lorries were employed as follows:—

| | |
|---|---|
| Public Authorities ... | 8,488 |
| Agricultural and forestry operations | 1,661 |
| Transport enterprises ... | 11,040 |
| Transport of liquid fuels ... | 1,136 |
| Commercial and other purposes ... | 43,412 |

Freight is carried by private concerns with whom public authorities join in financial participation. The examples of this latter type are the Motor Transport Services of Bavaria (Kraftverkehr Bayern); the Saxon Motor Transport Services (Kraftverkehr Sachsen); Northern March Motor Transport Services (Kraftverkehr Nordmark). The private concerns are grouped into two classes, *viz.*, the Association of Long Distance Motor Transport Enterprises, and the Association of Carrier Enterprises. The former includes members having between 1 to 5 trains of vehicles and comprises about 1,000 trains. The latter comprises of enterprises of small transport contractors, who possess only one vehicle on an average and operate over short distances.

In 1931 the passenger vehicles were employed as follows :—

| | |
|---|---|
| Private vehicles for commercial, professional and other purposes ... | 4,77,202 |
| Vehicles in the service of the Public Authorities ... | 7,522 |
| Ambulances ... | 1,924 |
| Hackney carriages and motor buses ... | 36,295 |

At this time passenger traffic was divided into three classes of enterprises.

(1) Firstly, there were enterprises organized by the Reichspost. In 1929 the Reichsbahn and the Reichspost had entered into an agreement to try to eliminate the lack of co-ordination of the different services organized by the public authorities. By this agreement the Reichspost was given the right to form new passenger lines and the Reichsbahn was given the right to form new goods services. The Reichsbahn was required by the agreement to transfer gradually all passenger lines to the Reichspost. The agreement also included detailed provisions regarding the opening of new competitive lines. By 1930 a considerable degree of co-ordination had been achieved and it was possible to issue rail-road combined tickets and also through luggage registration.

(2) Secondly, there were passenger enterprises organized by public authorities, like provincial governments, municipalities, etc. They generally organized the services with the participation of the local railways.

(3) Thirdly, there were privately organized enterprises, with which, the Reichsbahn had, in certain cases, organized liaison services.

### (1) *Reichspost Services* (1931)

| | |
|---|---|
| Length of the lines | ... 46,483 Km. |
| No. of vehicles | ... 3,939 |
| Distance run | ... 82,530,000 Km. |
| Passengers | ... 95,000,000 |

### (2) *Enterprises organised by public authorities* (1931)

| | |
|---|---|
| Length of the lines | ... 1,27,888 Km. |
| No. of vehicles | ... 1,652 |
| Distance run | ... 48,485,000 Km. |
| Passengers | ... 77,110,000 |

## RAIL-ROAD COMPETITION

It is difficult to assess the extent of rail-road competition in Germany for want of accurate data and on account of the conflicting claims and estimates made by the railways and the motor interests. It was estimated by the D.R.G. (Deutsche Reichsbahn Gesselschaft) that in 1929 motor transport was responsible for depriving the railways of RM 190 million of passenger traffic and RM 220 million of goods traffic. The figures for 1932 were 20 per cent lower at RM 150 million and RM 180 million, respectively. On the other hand, the motor interests urged that the competition from motor transport was not as serious as was alleged. It was stated on their behalf that on the basis of transport capacity the share of motor transport in the conveyance of goods was only 0.5 per cent; which percentage would increase to only 2.3, if calculations were made on the basis of actual goods receipts.

The railways took technical and rating measures to meet the motor transport competition. For the conveyance of parcels the railways organized local goods trains called 'Leichte Guterzuge'. These trains had closely linked intercommunication wagons which made the trains look and operate as single units. They were extremely mobile and fast. The time tables of goods trains were changed so that they would be loaded during the day and travel at night. To obtain a rapid service even the smallest stations were supplied with light locomotives for shunting. The train speeds were increased and unnecessary long halts were eliminated. Attention was paid to connecting services at the junctions. Fast goods trains were introduced. Container and cartage services were improved.

Among the rating measures may be mentioned the issue of collective tickets at 33⅓ per cent. The minimum number of shares of a collective ticket was reduced to 12. One free journey was allowed when 31 persons shared a ticket. Special concessions were given on excursion trains. When whole trains were collectively booked concession to the extent of 50 per cent was given in rates. Special concessions were also granted in respect of school children's tickets, holiday tickets, etc. The D.R.G. also made agreements with certain motor forwarding agents by which they made substantial reduction in rates so as to eliminate any fear of motor competition in respect of cartage of goods.

All motor services operating beyond the municipal limits were required to obtain a licence by a decree of 1919. This provision was confirmed by a law passed in 1925. A decree of 1928 defined motor transport lines as public services which operated with a certain regularity. The D.R.G. is the final authority in respect of traffic requirements. In 1931 transport by lorry over distances of more than 50 km. was made subject to a licence. Later a compulsory minimum tariff for motor transport was established and it was brought in line with the tariff for the three highest classes of the D.R.G. Inspection of motor services was introduced with the addition of severe penal clauses to the existing regulations of motor transport. This treatment meted out to motor transport was regarded by the interests of the latter as an attempt by the D.R.G. to achieve complete monopoly of transport.

The defence put forth by the D.R.G. was that it had to respect the obligations placed upon it by the Reparations. Further it was stated on its behalf that the railways were obliged to construct and maintain the permanent way. Again it had to pay heavy staff and insurance charges, and considering the place of importance which the railways occupied in the economy of the country, the restrictions, etc., placed on motor transport were justified.

The motor transport operators strengthened their case by replying that as far as the reparations were concerned their burden was falling on the whole community, and in any case they were on the decrease. They argued that the Government had given land free to the railways for the construction of the permanent way and even in the upkeep of the same, the Government were giving substantial subsidies. Motor transport had to pay more than enough in taxes for the upkeep of the roads, which were used by other users too, whereas, in the case of the railways their way was used only by themselves and they owned the permanent way. As regards insurance charges, the motor companies argued that the risks of road transport were greater than those of rail transport, and in any case the State paid not more than R.M. 5-6 million a year for damages. They also claimed that motor transport rendered greater public service and it had actually, created traffic in parts of the country which were formerly isolated. They therefore asked for reduction in taxes and in general a more lenient policy towards them.

The Nazi Government adopted a more favourable attitude towards motor transport and enacted laws favouring them. In April 1933 the licence fee on new motor cycles and new touring cars was abolished. In May of that year a law was passed by which the owners of motor cars and motor cycles were given the option of making a lumpsum payment instead of the yearly licence fee. By a Law of June 1933 the Reichsautobahnen was established. This enterprise was a subsidiary of the Reichbahn formed for constructing and operating special roads reserved for motor traffic. This law also created a new post of the Inspector-General of German Road Affairs, with wide powers in respect of all proposed road construction.

## RAILWAYS IN GERMANY

On the eve of the first World War 61,404 kilometres of railways were in operation in Germany. Of these 57,858 kilometres belonged to various states. There were in addition 10,000 kilometres of local light railways. At the outbreak of the second World War, Germany was operating 53,700 Km. of railway lines. In addition, private railways accounted for another 4,700 km. By the Weimar Constitution all the German railways were transferred to the Reich. The railways agreement between the Reich and the various States was settled in April 1920 by which it was decided that the Reich should pay an indemnity to the States equal to the original capital invested by the latter, plus the amount of the deficits caused by the war. The Dawes Plan made the German railways a guarantee for the reparations payments. The Plan also formed an intermediary joint stock company called the Deutsche Reichsbahn Gesellschaft, which was given the operating rights of German railways up to 1964. This company was to be administered by a managing board of 18 directors, half of whom were to be appointed by a trustee appointed by the Reparation Commission, and the rest by the German Government and the private holders of preference shares. After the third year of the Plan, the German railways had to make annual payments up to 660 million marks. The managing director of the D.R.G. was to be a German but there was also to be a foreign resident Commissioner who was given special powers under the trustee.

This scheme was modified by the Young Plan in 1929. The payments remained the same and the independent character of the D.R.G. was maintained, but the foreign participation in the board of management was brought to an end. The German Government had to guarantee the payments by the railways as mentioned earlier. It could nominate the members of the 'Railway Council'. It was also authorised to confirm the appointment of the chairman and other directors, including the managing director. However, this new arrangement was not successful and a new agreement was signed at Lausanne. This agreement abolished the annual payment. But before the Lausanne agreement could come into force, the German Government repudiated the whole of the Reparations Agreements.

The German railways are the best laid out rail-road system in the world. The railways penetrate the innermost parts of the country and are not prevented from reaching forests or mountains. The valleys of the Rhine, Weser, Elbe, Oder and Danube have provided ready-made routes for the German railways. In Germany there is no geographical centre of attraction, such as Paris in France, with the result that the German railways do not suffer from the inconveniences of excessive centralisation of administration. The German railways have shown the greatest possible flexibility in adapting their services to the local needs. However, as compared to the railways in the neighbouring countries, the German railways appear to be more centralised for the purposes of administrative centralization but decentralized in their economic functions. Thus there is a golden combination of unity of management and flexibility of operation. Because of their close relationship with the State, the German railways have been able to put up a greater resistance, to motor transport competition, than has been the case in other countries.

The Minister of Transport controlled the whole railway system which was divided into main and secondary lines. The Weimar Constitution laid down clearly the obligations and rights of the railways. According to it, railways of general interest must be constructed and equipped according to uniform specifications laid down by the State. The State would also prescribe conditions to ensure safety of the users. Under normal conditions of transport, the railways cannot refuse to take goods for conveyance, which has to be done in the order in which they are received, the railways are held responsible for accidents occurring due to their own fault. They are also liable for loss, decreased value, deterioration and damage to goods and luggage caused through non-observance of the specified delivery periods. The railways are not allowed to discriminate in rates between different users, except in certain specified cases. The rates have to be approved by the public authorities, who have a right to modify the same. Any disputes between the Government and the railways are arbitrated by the Railway Tribunal. New lines cannot be constructed without the permission of the Government. The D.R.G. cannot exercise its right of expropriation without the authority of the Government. The railways have to collect the tax on passenger and goods transport on behalf of the State. Up to 1924, the Postal administration was not required to pay for the services rendered by the railways. After 1924, all services rendered by the railways to the Post Office had to be paid for. The railways were obliged to carry soldiers at concession rates. They had also to accommodate the customs authorities for carrying out their inspections. The Government would also lay down conditions for the recruitment of staff. The railways were compelled by the State to establish a pension fund for their employees.

The D.R.G. was given the sole right of railway operation. The relevant section of the Law of 1924-30 reads as follows:—

"The Reich shall concede to the Company the exclusive right to operate the railways of the Reich under the conditions set forth in the present Law and in the Company's Statutes."

The Law also sought to protect the rights of private railways against any competition. This was especially done in the case of private railways in Prussia. To the private railways the State gave no guarantee as to the interest payment, though the Law stipulated that the railway rates must be so calculated as to ensure the payment of an appropriate rate of interest. The Government later on went even further to grant tax remissions to private companies which ran in deficits.

After the amalgamation of the State railways in 1920, the Reich became the owner of their capital. It also took over the debts contracted by the States for their repurchase.

From 1928 onwards, until the Nazis came to power, the railways along with other economic activities went through a severe economic crisis. There was a continuous falling off of traffic and the railways were running into large deficits every year. The total deficit for the year 1933 was R.M. 309,900,000. The crisis was worse in railways on account of further causes, such as the very heavy fixed charges which amounted to 70 per cent of general operating expenses; the abuse of special rates; foolhardy investments; and a severe competition from motor transport.

## RECENT DEVELOPMENTS

On account of the partition of Germany in Western Germany and Eastern Germany and owing to lack of data it is difficult to give an idea of the transport system of Germany today. However, an endeavour is made to make a few observations based on press reports.

## TRANSPORT LEGISLATION IN WESTERN GERMANY[1]

Two bills which will revolutionise the relative position of road and rail transport were recently approved by the

---

[1] See the Railway Gazette, London, 18. 6. 54.

Federal Cabinet of Western Germany. When put into effect they will weigh heavily against road transport. The first of these bills, the Road Relief Bill, provides that the long-distance transport of certain commodities by road shall be prohibited. Among these goods are ore, stone, coal, slag, cement and concrete and ferroconcrete and bulky steel products, pitprops and other timber, grain and sugar.

The second bill, the Transport Finance Bill, is an alternative to the original proposal of the Ministry of Transport to prohibit the long-distance delivery of goods from factories by road. It does not prohibit such delivery but raises punitive taxation against it; and it provides for a revision of the taxation on road freight vehicles, including a sharp increase on all heavy lorries. At the same time the taxes on road vehicles of other types will be reduced by 20 per cent. The transport tax is to be extended to road vehicles on conveying freight within a 50 km. limit, including traders' own vehicles. This type of transport has not been taxed previously. The transport tax, to which the German railways are also subject, is at a rate of 7 per cent. Long-distance delivery of goods from factories by road is to be subject to an increase in taxation of over 400 per cent. The present rate is pfg. 0.99 per ton-kilometre, and this is to be raised to pfg. 5.0. In addition, the price of mineral oil is to be raised by pfg. 1 per litre, and the cost of petrol by pfg. 7 per litre. Increased subsidies are to be paid, to offset this, to agriculture and inland water transport. A spokesman of the Finance Ministry has said that the aim of the Government is to improve the competitive position of the railways by increasing the working costs of road traffic. There have been protests from the West German Traders' Associations about these proposals. The transport industry, it is argued, is not in a position to bear the charges which would be placed upon it, furthermore, as freight charges represent an integral part of the price of goods, there would be a general rise in price levels.

## INTER-ZONAL TRAINS BETWEEN WESTERN AND EASTERN GERMANY[1]

An agreement has been reached between the (Western) German Federal Railway and the Reichsbahn (Eastern Germany) on improvements in inter-zonal traffic. It provides for additional facilities which the railway authorities in the West have long been seeking to obtain.

The number of inter-zonal trains is increased from 12 to 24 a day, in both directions. During holidays, such as Easter, Whitsun, and Christmas, this number may be doubled. The agreement provides for two additional crossing points at the zonal boundary—one at Oebisfelde, just north of Helmstedt (the normal Berlin route before the war) and one at Gutenfurst, in Bavaria. Both railways undertake to provide sleepers and dining cars on their services, equalise their charges on these, and accept payment in the currency of the passenger's place of residence (East or West marks). These measures were to come into force from 15th July, 1954.

## TRANSPORT PROBLEMS OF WESTERN GERMANY[2]

Addressing the German Engineers' Association at Essen, recently, Dr. Hans Seebohm, Federal Minister of Transport gave an account of the problems facing the railways of Western Germany and of the way in which they were being tackled. The division of Germany into two States, with the consequent partition of the resources of the former German State Railway, has added to the difficulties of the devastation caused by the war. There is a vocal section of fairly influential public opinion which urges large-scale abandonment of the railways in favour of road transport. The absurdity of this as a general policy is demonstrated by Dr. Seebohm. It demands construction of more *autobahnen* without realising what that would involve financially and otherwise.

---

[1] See the Railway Gazette, London, 2. 7. 1954.

[2] See the Railway Gazette, London, 20. 8. 1954.

The German Federal Railway authorities have made extraordinary efforts to repair the heavy war damage to their lines in which they received in the earlier post-war years, very considerable help from the occupational authorities in the three western zones. Apart from actual damage, there were heavy arrears of maintenance and renewals. Resources have been limited, and although a comprehensive plan was drawn up in 1951 intended to be completed in 10 years, progress has been much less than was hoped for.

It was estimated at the beginning of the present year (1954) that to make good the remaining war damage and bring maintenance up to date would cost about DM. 860 million a year for five years. It will not be easy to find this sum and prices do not tend to fall. The Minister submitted to the Government a scheme covering financial and other measures designed to facilitate this. A considerable programme of rationalisation has been put into operation; and although this has necessitated extensive staff changes, with all attendant difficulties and misgivings, good feeling is stated to have been maintained and reforms carried through which already have had a noticeable effect. These have included re-organising the operating, engineering and other departments, and reducing the number of repair depots, sheds, stores, shunting yards, etc.

The process is still being pressed forward, and by 1956 an annual saving is expected of some DM. 180 million. Concurrently with these negative measures, as Dr. Seebohm described them, have gone others, involving certain capital works, intended both to increase traffic and to lower working expenses. These include electrification, now being carried out on 680 miles of route, mechanisation of freight handling, improved shunting yard equipment, extension of power and automatic signalling, extended application of diesel traction, and special vehicles for facilitating railroad interchange, increase in container working, etc.

Dr. Seebohm stressed the fact that, despite the difficult times and in contrast to what had occurred in some other countries the German railways had been for a long time exceptionally free from industrial disputes and although the actual value of such a circumstance was very difficult to assess it had obviously been of immense economic value to all sections of the community. The Government of the Federal Republic, he stated, is alive to the necessity of getting the best out of all forms of transport in the national interest and has laid proposals before the legislature for a comprehensive plan, to be supported by statutory powers for operating them as self-supporting undertakings with, however, elimination of wasteful processes. Measures are proposed for reducing the number of road accidents, which have increased alarmingly; where traffic can be efficiently conveyed by rail or water, its movement by road, while profitable to certain interests, is regarded as undesirable, partly as aggravating the accident problem. The new legislative proposals are being made, the Government claims, with the objects of greater equity in taxation and transport rates and fares, increased co-operation between railway and postal departments and reduction of unnecessary heavy vehicular traffic destructive of the roads.

## SHIPPING IN GERMANY

The remarkable expansion of German shipping before the first World War was more due to certain economic factors than due to direct Government aid. These factors were the same as were responsible for the territorial and industrial expansion of Germany. The emigration of German nationals was also one such factor. Of course, the German Government did exert an encouraging influence on the entire shipping movement and gave it a proper place in the national set up. The official as well as the popular opinion and sympathies were all in favour of developing Germany into a strong sea power. However, before 1914, Government funds were not spent directly on the development of shipping. It is interesting to note that the different means of transport, *viz.*, the railways, inland waterways and shipping combined to take advantage of the general expansion of the overseas trade of Germany. In the whole national industrial system shipping was assigned its proper place and the various components of the shipping industry, like the ship-builders, the shipowners and the financiers made a common cause with each other. Thus we witness a parallel development of production, distribution and financing of foreign trade in Germany. German foreign trade and shipping provided stimulus for the development of each other. The German merchant marine promised effective carriage of German goods. But more importantly, shipping provided an invisible credit that could be used in buying the much needed materials. Shipbuilding besides is a great industry, which, because of its relations with other manufactures, enlarges the scope of economic enterprise at home. The encouragement given to this industry led to the establishment of great shipyards at Stettin, Hamburg, Bremen, Danzig and Kiel. These shipyards built ships not only for the German shipping companies but also for foreign concerns. These ships included both merchant and fighting vessels. In 1895 the German merchant marine included about 1,700 vessels. By 1914 her gross tonnage was 5,135,000. One important way in which shipping was fostered before the war, was by reserving the coastal trade of Germany to German ships. This was done in 1880. Exceptions were made wherever international treaties provided otherwise. For instance, in 1881 the right to engage in German coastal trade was granted to Belgium, Brazil, Denmark, Great Britain, Italy, Sweden Norway and also the Netherlands.

Yet another method of aiding shipping was by the establishment of emigrant sanitary control stations. Such stations were first established in 1894. It may be recalled that in the last decade of the nineteenth century there was a large-scale migration of Europeans to the New World. This emigrant traffic was very large and all sorts of methods were employed by shipping companies in order to induce these emigrants to travel by their ships. In fact, shipping companies encouraged this emigration by wide publicity which painted rosy pictures of the life in the United States and elsewhere. The right of erection and management of the emigrant sanitary control stations was given to the German shipping companies which exercised such pressure on the transmigrants that it was difficult for them to travel from German ports, and to a certain extent from the Dutch and Belgium ports, on other than German ships.

Under the Versailles Treaty Germany had to agree to abstain from exercising any control over the emigrant traffic, except for ensuring that the passengers were bona-fide in transit. Germany was not to exercise any control, either directly or indirectly through a shipping company or any other interested body. However, the German Government did offer inducements to emigrants to travel by German ships, by reduction of railway rates and of fees for transit visas. She tried to keep off foreign competition by maintaining a system of licences for passenger ships in the emigrant trade.

## GERMAN SHIPPING AND THE PEACE TREATY

At the Peace Treaty of Versailles Germany had to agree (*i*) to replace Allied tonnage lost or damaged due to the war, (*ii*) to grant the most-favoured-nation treatment to Allied shipping in German waters, (*iii*) to grant freedom of transit to Allied ships in these waters, and freedom for transmigration traffic. The Treaty settlement also prohibited flag discrimination and all the German ports were opened to Allied shipping on terms of equality with German shipping. However, no provision was made for an international regime.

Under the reparations provisions of the Peace Treaty Germany agreed to make restitution to the Allied and Associated Powers for ships sunk by German submarines, ton for ton, and class for class. Germany was to cede to the Allies all German ships of 1,600 gross tons and more; one-half (reckoned in tonnage) of the ships between 1,000-1,600 tons; one-quarter of her steam trawlers and one quarter of other fishing boats. These were to be delivered in two months of the signing of the Treaty. The Allies were also given the right to have constructed in German yards up to 2,00,000 a year. However, in the first three years only 40,000 tons a year were constructed.

The Peace Treaty accorded the most-favoured-nation treatment for the Allies in all shipping matters, which included sea fishing, coasting trade and towage. Direct or indirect discrimination affecting the transport of imports and exports was prohibited. The Treaty also prescribed that the nationals, property, and vessels of the Allied and Associated Powers were to enjoy in all German ports the same treatment in all respects as German nationals, property, and vessels, and to benefit immediately and unconditionally from any preferential regime granted to any foreign Power.

Certain clauses of the Peace Treaty provided that the seaports of the Allied and Associated Powers should be entitled to all benefits and to all reduced tariffs granted to German railways or navigable waterways for the benefit of German ports or of any port of another Power. The Treaty also compelled Germany to participate in tariffs intended to ensure for Allied ports advantages similar to those granted by Germany to her own ports or to the ports of any other Power. These provisons were not according to international practice. They were unilateral in their nature and operation, and were to last for only five years.

By the Treaty the ports of Hamburg and Stettin were to be placed under a general regime of free zones and had to be leased to Czechoslovakia for ninety-nine years.

## GERMAN SHIPPING AFTER 1919

After the war Germany did take measures to assist the shipbuilding and shipping industries in order to build up a strong mercantile marine. In spite of the depletion of shipping caused by the Versailles Treaty, Germany was able to restore her loss partially by 1932 when her gross tonnage amounted to over 3,888,000 tons.

After the Treaty the German Government committed itself in 1921 and 1922 to the ship-owners to replace one-third of the mercantile marine tonnage surrendered to the Allied and Associated Powers. Originally 12 milliard marks were appropriated for this purpose. In 1922 owing to the depreciation of the mark this amount was increased to 18 milliard marks. Late in 1924 the mark was stabilized and in 1925 the Government authorized a loan fund of 50 million marks for new construction. Loans up to 50 per cent were granted out of this fund at rates between 4 and 6 per cent. By October 1928 the fund was exhausted. In 1926 the Government made out a loan of 18 million marks for financing the construction of six tankers. Further direct assistance was rendered by an export credit scheme inaugurated in 1930 for the construction of ships for foreign account. The Government guaranteed in 1932 a loan of 20 million marks to the German shipowners. Another loan of 77 million marks was guaranteed by the Government in 1932. Of this loan 7 million marks were given to tramp companies. As an anti-depression measure the Government granted in 1932, 12 million marks in loans for the purpose of subsidizing the scrapping operation of nearly 4,00,000 tons of obsolete German ships. This figure represented about 10 per cent of the total German mercantile marine at the time. In 1933 the German Government authorized loans up to 45 million marks to assist shipping. Later in the year another appropriation of 20 million marks was made for loans, which were to be repaid, *if possible*. The Government had created a housing subsidy fund of 500 million marks earlier for meeting the unemployment situation. At the end of 1933 grants from this fund were made for the cost of repairs and of overhauling of German sea-going vessels. In 1934 this scheme was made applicable to the construction of new vessels, on the only condition that in the first ten years of the life of these ships prior Government permission was required for their sale.

The Government went even further and granted operating subsidies at the rate of 3 pfennigs per gross ton per day, in addition to 20 per cent of the wages and salaries of the crew. This was estimated to amount to 20-25 per cent of the total operating costs in the case of a vessel of 6,000 tons. The Government made no secret of their policy of assisting shipping. It was declared on its behalf in 1934 that German shipping subsidies were necessary and would be continued so long as German shipping remained at a disadvantage in international competition. The Government also placed an order through a financial holding company for three 18,000-ton passenger ships for the Far East services. The Government also gave subsidies to shipbuilding by paying the difference between the British quotation for tankers and the lowest economic price that could be quoted by a German shipyard. The Government also enabled German shipyards to accept delivery in kind in part payment for shipbuilding. The Government froze various funds under the Standstill Agreements whereby foreign shipping companies were induced to have their ships built in German shipyards in order to utilize these funds. Such measures bore fruit and the foreign orders in German shipyards rose from 29 vessels (1,07,025 tons) in 1929 to 65 vessels (2,19,990 tons) in 1934.

The difficulties of the depression had brought the large German shipping companies in financial difficulties in 1930, and under the pressure from the banks they had to combine to form the Hapag-Lloyd Union. This brought under a unified control 60 per cent of German shipping and six large companies and their subsidiaries. The catastrophic situation in the shipping industry prompted the senates of Bremen and Hamburg to submit a memorandum to the Reich Government. The difficulties of German shipping were attributed to (*a*) the trade depression, (*b*) foreign subsidies, (*c*) depreciated currencies in Great Britain, Norway and Japan, and (*d*) internal factors such as the unsound concentration of power in the Hapag-Lloyd Union. The memorandum proposed the following measures to meet the situation.

(*i*) Currency compensation to offset the high exchange value of the mark.
(*ii*) Transfer to the Reich of all social charges.
(*iii*) Reduction in taxation.
(*iv*) Improved credit facilities comparable to those enjoyed by foreign shipping companies.
(*v*) Decentralization of administration and in particular the dissolution of the Hapag-Lloyd Union.
(*vi*) Relief from debt.
(*vii*) Improvements in management, with some State supervision.

We have already noted above the measures taken by the German Government to help the shipping industry out of the difficulties. The Nazis incorporated shipping in the State-controlled economic system. They had divided Trade and Industry into 13 main groups. Shipping came under Group XII entitled Transport and Communications. Shipping was further divided into sub-groups, like shipowners, ship-brokers, pilots, seaport services, etc. The shipping group was headed by the Spitzenvertretung der deutschen Schiffahrt. In 1933 the process of decentralization of shipping was begun and completed in 1935. Gradually the shipping policy was made more and more part of the general State policy. The shippers and ships were brought within the scope of the exchange control regulations.

The German currency regulations were so designed as to enable the use of depreciated registered marks for payment for accommodation on German ships. This strengthened the position of German companies which could undercut the rates agreed upon by the North Atlantic Shipping Conference. The Conference (of which German companies were also members) protested to the German Government. The Government withdrew this arrangement but only after the non-German lines had left the Conference. The Conference imposed heavy fines subsequently on two German lines which had sold tickets against registered marks. The German Government for some time, later on, tightened the exchange control regulations against foreign shipping lines with offices in Germany. They were required to take out a permit if amounts of more than 200 marks per passage had to be transferred from out of Germany. These provisions were later withdrawn when strong protests were made by foreign lines. In 1935 too complaints were made to the German Government against the use of barter, and exchange control schemes, to divert trade from British to German ships. Germany made similar efforts to barter German shipping space against American goods. She paid for American goods by shipping space on German ships from America to non-German ports. This was also stopped after strong protests were lodged with the German Government.

Like many other countries Germany was forced to adopt an exchange control system; and having no reserves of gold to draw upon, she had to maintain almost day-to-day balance of payments. The official rate of exchange was not devalued for political reasons with the result that the German mark was overvalued in terms of other currencies which had devalued in the preceding years. This inevitably led to concealed devaluation in commercial transactions. Germany took advantage of these prevailing conditions to develop currency and exchange control into an effective instrument of economic and political penetration into other countries.

After the second World War, the Potsdam Conference prohibited altogether certain German industries, which included the shipbuilding industry. It is not possible to comment on the German shipping and shipbuilding industries during and after the second World War for want of data. However, the following figures would give a rough idea of the position.

### MERCHANT FLEET TONNAGE

*(Thousands of gross registered tons)*

| | |
|---|---|
| 1939 | 4,483 |
| 1948 | 428 |
| 1949 | 300 |
| 1950 | 460 |

### NEW SHIPS

| | |
|---|---|
| 1948 | ... |
| 1949 | ... |
| 1950 | 150 |

### SHIPS SCRAPPED

| | |
|---|---|
| 1939 | 168 |
| 1948 | 7 |
| 1949 | 6 |

---

Source: Economic Survey of Europe in 1950, Economic Commission for Europe, U. N.

## AIR TRANSPORT IN GERMANY

The development of air transport in Germany after the first World War was greatly influenced by the Treaty of Versailles, which deprived Germany of military aviation. Civil aviation then became the only hope for the existence of the aircraft manufacturing industry, and the Germans turned their attention towards the same. They developed air lines to remote countries and sold planes to them.

The Versailles Treaty deprived Germany of her colonies also. She thus could not develop her air lines in the colonies. However, she concentrated her attention on providing an efficient air transport at home and also on creating the foremost network on the continent of Europe. Ambitious schemes were launched by Germany in distant parts of the world. A line was opened for Kabul in 1938, in July 1939 a line reached Baghdad and Bangkok; in 1940 another was extended to Tokyo. Several lines to South America were also opened up. The second World War interrupted German ambitions to operate air services to North America, South Africa and overland services to the Far East over the Soviet territory. Germany dreamt of a world-wide system of German air transport, in which the domestic lines organized by Germany in different countries were to serve as link-ups.

The Convention of 1919, prepared for regulating international air navigation, openly discriminated against Germany, which was not allowed to be a party to it. She was barred for several years from signing the Convention and to establish air services to her former enemies. Even when the ban was lifted Germany did not adhere to the provisions of the Convention. The Convention indirectly compelled the neutral states to refuse air transport privileges to German companies which were already well established in Europe. The ex-Allies, however, had already obtained for their aircraft freedom of transit and landing in Germany up to 1 January, 1923, under the provisions of the Peace Treaty. The Convention of 1919 also attempted to prevent German interests from obtaining a foothold in international air navigation in a non-German guise. This was done by placing a limitation upon foreign interests in a corporation which may own aircraft possessing the nationality of one of the contracting parties.

In 1921, the Deruluft, an air transport enterprise with equal German and Soviet shares was organized. It started regular services between Berlin and Moscow from 1922. With the coming of Hitler to power the Russo-German relations were not very cordial and Moscow did not approve of the German plans for an overland service to China. In 1937 the Deruluft services were indefinitely suspended and soon the enterprise was dissolved. In 1939 a new air transport accord was reached between Germany and Soviet Russia. A new service operated jointly by the German Lufthansa and the Soviet Aeroflot was inaugurated. This came to an end in June 1941 when Germany attacked Soviet Russia.

Late in the thirties Germany had conducted 50 successful experimental flights across the Atlantic and she declared herself ready to begin regular operations to the United States. But on account of the American dislike for Hitler's Germany, as also the absence of any reciprocal facilities by Germany, the U.S.A. refused landing rights to her.

In spite of the restrictions of the Versailles Treaty Germany made significant progress in the production of civil aircraft. Even though military aviation constitutes a larger market, the requirements of commercial civil aviation are not less significant. German aircraft manufacturing industry found sufficient employment in catering for civil aircraft orders. The Junkers manufactured even military aircraft in their foreign plants like the Fili plant near Moscow. In South America, Germany organized local enterprises which bought Junker planes. Iran and Columbia had the bulk of their local air transport provided by German aircraft. This civil aircraft manufacturing industry of Germany was developed to such an extent that it was very easy later on to switch on to the production of military aircraft. The technological advances made in civil aircraft production were of immense help in developing a strong air force.

In the second World War the Germans placed great reliance on air power in establishing and maintaining a unified Europe, under their domination. Otto Muck wrote in November 1940, that "owing to the German air victories in East and West, air power is becoming a geo-political factor. Its tremendous speed and radius of action make possible thinking in continents; it is the means of transversing, covering and controlling greater areas from one point. And since the New Order of Europe is already definitely indicated as the next historical reality, air power can be considered in a double sense as the true bearer of this geo-political event : firstly, because it has prepared the victory, and secondly, because it is the only means of mastering and controlling this continental area."

## THE STATE AND CIVIL AVIATION

Before 1926 there were two large air transport companies, *viz.*, the Aerolloyd and the Junkers. Until 1925 the Government did not hold directly any shares in these concerns. The Government had participations with some other companies, like the Norddeutscher Lloyd, which held stock in the two large concerns. In 1925 the German Government acquired 80 per cent of the stock of the Junkers. During the next year the air companies were in financial difficulties. Taking advantage of this situation the German Government forced the air transport concerns into an amalgamation called the Deutsche Lufthansa A.—G. The stock of this enterprise was to be held in the proportion of 26 per cent by the Reich, 19 per cent directly by the *Lander*, *i.e.* member-states of the Federal Union, 27.5 per cent indirectly by the *Lander*, provinces and municipalities, and 27.5 per cent by private interests, including those companies in which the Reich held stock. It is said that in practice the Governmental units held a much larger proportion than the 72.5 per cent allotted to them.

With the advent of the Nazi regime the proportions of the *Lander* and the municipalities were transferred to the Reich, which practically owned 100 per cent of the stock. It is said that the Lufthansa never paid any dividends and the excess of the subsidies over the deficits was turned over to the Government. The Lufthansa held 40 per cent of the stock of the Deutsche Zeppelin-Reederei, G.m. b.H., which operated the German airship services. The rest of the 60 per cent stock was held by Luftschiffbau Zeppelin, G.m.b.H. The Austrian air transport company Oelag was absorbed by the Lufthansa in 1938. Before 1934 there was an air transport enterprise in Germany for operating domestic air services. It was called Deutsche Verkehrsflug A.—G. This company was under the control of a number of German *Lander* and of cities. It was merged with the Lufthansa in 1934.

## GERMAN PENETRATION IN LATIN AMERICA

By 1940 Germany had gathered tremendous influence in South American air transport. The German routes were concentrated in Brazil, Bolivia, Peru and Ecuador. While the Pan American Airways encircled these areas, German airways served them by cutting across the continent. In South America Germany and the U.S.A. were the main contenders for air transport supremacy. After 1935 Air France and the Lufthansa began to co-operate with each other in the South American field, as a result of an agreement that was reached in May 1935. A new agreement was signed in July 1937 which provided for the polling of the receipts on the South American routes. In 1940 an Italian trans-Atlantic line was established. This operated in close co-operation with the German services in South America.

The British made a late appearance on the South American scene and in 1931 they even aided German air expansion to South America by granting the Lufthansa the landing rights at Bathurst, British Gambia in West Africa. Before the war broke out it was abundantly clear that the German attempts of air expansion in South America were too vigorous to be called purely economic, and the political intentions of Germany could not be easily disguised.

# TRANSPORT IN THE U.S.A.

## RAILWAYS IN THE U.S.A.

During the first World War the Government had temporarily assumed control of the railways in order to facilitate movement of millions of troops and of goods. By the Transportation Act of 1920, the Federal Government restored railroads to their former owners. The wartime Government control and operation of the railways was regarded in some quarters as dangerous and revolutionary. Some regarded it as a normal step in the direction of ultimate public ownership. However, this Act put an end to all speculation about nationalization. In turning over the railroads to the owners the Government provided for their management and operation along certain lines. The Government intended to devise a plan which would ensure amicable relations between the railways and their employees and also assure a fair return to ownership without the possibility of excessive returns on investment.

The Transportation Act established a Railway Labour Board, which was authorised to handle labour disputes of various kinds, especially those relating to wages, and rules and conditions of work. The wages disputes were to be settled according to the following criteria :—

(*i*) Scale of wages paid for similar kinds of work in other industries.
(*ii*) Relations between wages and cost of living.
(*iii*) Hazards of the employment.
(*iv*) Training and skill required.
(*v*) Degree of responsibility.
(*vi*) Character and regularity of employment.
(*vii*) Inequalities arising from previous wage adjustments.

The Act also provided for the regulation of the profits of the railroads. Net earnings over and above six per cent were to be shared equally between the reserve fund of the individual railroad company and a general railway contigent fund under the control of the Interstate Commerce Commission.

The Act also contemplated regional consolidation of railroads. But much headway could not be made in this direction.

In 1925 the Hoch-Smith resolution was passed. This dealt with railway rates. In 1926 the Railway Labour Act was passed. This Act dealt with wages and conditions of labour and displaced the labour provisions of the Transportation Act of 1920. The new Act provided for (*a*) conferences, (*b*) boards of adjustments, (*c*) national mediation boards, (*d*) arbitration, and (*e*) emergency boards, as agencies for settling labour disputes.

The year 1920 may be regarded as the peak year for the U.S. railways. In that year about one and a quarter billion passengers were carried, giving the railways receipts from passengers of $1,304,815,000. A decline set in thereafter and ten years later the figures for passengers had dwindled to 40 per cent and that for receipts to $ 8,75,929,000.

In 1931, the U.S.A. had an immense railway system operated by 1,459 companies, and 215 terminal and switching companies. Railways were started in the U.S.A. with the realization that their primary function was to span the continent from coast to coast. It was this feature that explains the will to overcome the barriers of nature and climate to bring about the establishment of a vast network of railways.

There are in all 3,82,144 miles of railway track in the U.S.A. All track is standard gauge. There are 132 Class I line-haul railway companies, which together account for nearly 96 per cent of the total rail traffic, both freight and passengers, and 95 per cent of the total annual mileage.

These companies employed in 1949 1,191,444 persons with a total pay roll of $4,419 million. The corresponding figures for 1931 and 1940 were as follows :—

| | | No. of employees | Total payroll | |
|---|---|---|---|---|
| 1931 | ... | 1,260,758 | $2,095 | million |
| 1940 | ... | 1,026,848 | $1,964 | „ |

In 1931 these companies had 55,400 steam locomotives in use. This number was 39,624 in 1941 and 28,964 at the end of 1949. There were 1,267 diesel locomotives in service in 1941. This number increased to 10,888 at the end of 1949.

The Class I companies are divided into three groups. The first group serves the north-eastern district east of Chicago and Saint Louis and north of the Potomac and Ohio. The important companies operating in this area are the Pennsylvania System; the New York Central Lines; the Baltimore and Ohio System; the New York, New Haven and Hartford R.R. Co.; and the Erie System.

The second group runs through the south-eastern district. The important companies serving this area are the Atlantic Coast Line System (which includes the Louisville and Nashville Railroad); the Illinois Central System; the Southern Railway System, and the Cheaspeake and Ohio Railway Company.

The third group forms a vast railway system westward of the above two districts. The important railroad companies operating in this area are the Southern Pacific System; the Santa Fe System; the Union Pacific System; the Missouri Pacific System; the Burlington Route; the Chicago and North Western System; the Chicago, Milwaukee, Saint Paul and Pacific Rail Road; and the Rock Island System.

## U. S. RAILWAY OPERATIONS

(*Million*)

| Year | | Ton-miles of freight | Passenger-miles |
|---|---|---|---|
| 1920 | ... | —— | 46,848 |
| 1929 | ... | 4,47,321 | 31,000 |
| 1931 | ... | 3,09,224 | 16,974 |
| 1939 | ... | 3,33,438 | 22,651 |
| 1940 | ... | 3,73,253 | 23,762 |
| 1941 | ... | 4,75,072 | 29,350 |
| 1942 | ... | 6,37,984 | 53,659 |
| 1943 | ... | 7,27,075 | 87,820 |
| 1944 | ... | 7,37,246 | 95,549 |
| 1945 | ... | 6,81,001 | 91,717 |
| 1946 | ... | 5,91,982 | 64,673 |
| 1947 | ... | 6,54,728 | 45,921 |
| 1948 | ... | 6,37,917 | 41,179 |
| 1949 | ... | 5,26,500 | 35,095 |
| 1950 | ... | 5,88,572 | 31,771 |

Source: (i) U. S. A., H. M. S. O. (ii) Road and Rail in Forty Countries, Wohl and Albitreccia.

These figures show that the operations of the U.S. railways have declined after the end of the second World War. But they still remain at a level higher than in the pre-war years.

The American railways are in principle privately owned and operated. The Central Government, however, controls their management, through the Interstate Commerce Commission. The powers of the Commission have been continuously growing since 1887. The Commission is empowered to supervise the adequacy, safety, and continuity of services. Its sanction is necessary for the construction of new lines or the suppression of the old ones. The Commission must be referred to in case of issue of new securities, pools or mergers. It also supervises the tariffs, which it can suspend or amend. In fact, the railways are rigidly controlled by the Government. It is interesting to note that the State does not guarantee the capital, interest payments or debts of the railroads. The railways are required to carry certain kinds of traffic at reduced prices, *e.g.*, transport of troops at 50 per cent and mail at 80 per cent of commercial rates.

## Recent Developments

The growth in the use of diesel-electric traction is an important recent development in U.S. railways. Although the introduction of diesel-electric traction necessitates higher initial cost, it is amply compensated by the low maintenance cost of these engines. Besides the high prices of coal also have induced this change. Almost all important railroads. are fast changing over to this new traction especially because of its economy on longer hauls. In 1946 only 9.73 per cent of the total traffic was hauled by diesel engine locomotives. By 1950 this percentage had risen to 44.13 per cent. In the U.S.A. electric traction has developed only on the suburban lines. Only a very small proportion of traffic on the main lines is hauled by electric locomotives. Electric traction is developed on a considerable scale on important main line railroads, such as the Pennsylvania, and the New York, New Haven and Hartford.

Since 1949 the American railways are suffering on account of labour troubles. In 1949 and 1950 there were strikes in the coal mining and steel industries. These strikes in the production of essential materials had serious effects on the traffic and revenues of railway companies. There have been frequent labour troubles in the railways themselves. The railway workers have been agitating for a 40-hour five-day week, which is enjoyed by non-operating grades of railway labour and also by workers in many other major industries. The railway labourers have also been seeking wage increases to bring their wages in line with those in other industries in which there has been a rapid increase in wage rates after the war. Since the entry of the U.S.A. in the second World War, no less than six times had the President to use his constitutional powers and direct the Secretary of the Army to take possession and assume control of railroads in order to ensure continuous and uninterrupted service, when it was threatened by labour stoppages. The most recent of such occasions was on 25th August 1950 when the President directed the Secretary of the Army to take possession and assume control and operation of all Class I railroads and their subsidiary, and also certain terminal companies. A total of 301 organizations were then brought under Government control.

## ROADS AND ROAD TRANSPORT IN THE U.S.A

### ROADS

The U.S.A. has over three and a quarter million miles of road. This works out to about one mile of road per square mile of country and over 2,000 miles of road per lakh of population. A high proportion of the American roads have no special surface or only one of a very elementary kind. Of the nearly 3 million miles of rural roadway, 1½ million miles are non-surfaced, their surface being simply the soil that forms the roadway; 1 million miles have just a gravel surface, consisting of a layer of loose gravel spread over the carriage-way and kept in position by maintenance with a blade-grader. Bituminous or concrete surface covers about half a million miles, and of these about 2,00,000 miles may be considered as of a high quality type.

The American roads may be classified as (*i*) State roads, built and maintained out of Federal funds; (*ii*) country and local roads; (*iii*) urban roads. The construction and maintenance of roads and highway, and public or private motor transport are a function of the individual state and local governments. The Federal Government does render conditional assistance in this respect and the same is administered by the Bureau of Public Roads. This is a division of the Department of Commerce. The Bureau also undertakes highway research and road building and maintenance in Federal lands, like national parks, forests, etc. The Interstate Commerce Commission has been given regulatory control over safety of traffic and rates charged in interstate commerce, but the State governments have complete control of the highway systems in their own boundaries.

In 1944 the Federal Aid Highway Act was passed. This Act authorised a special grant from the Federal funds of $ 500 million per year for the first three post-war years. By this Act a national interstate highway system of 40,000 miles has been designated. This system was intended to connect main metropolitan and industrial areas and to incorporate the main routes of strategic importance for national defence. This system will of course be of immense benefit to all users of roads. When the project is completed a national network will be formed connecting all larger cities.

Grants are also made to States from the Federal funds. These grants depend upon the relative area, population and mileage of rural main routes in each State. States have to make their own contributions equal to the appropriation made by the Federal Government.

## MOTOR TRAFFIC

Motor traffic in the U.S.A. is perhaps the heaviest in the world. In 1931 there were 25,814,103 motor vehicles in the U.S.A. This represented at that time 75 per cent of the world total. It means that in that year there was one motor vehicle per 4.7 of population, the world figure being 1 vehicle per 57 of population. Of these motor vehicles 3,233,457 were motor-trucks.

The figures for 1950 are as follows :—

| | |
|---|---|
| Current registration of private cars or taxis ... ... | 40,345,000 |
| Buses ... ... ... | 218,000 |
| Trucks ... ... ... | 8,595,000 |
| TOTAL ... | 49,158,000 |

As compared to railways motor transport in the U.S.A. is less strictly regulated. Bus and truck operators are not regulated by any Federal law. But almost all States have laws relating the operation of motor vehicles as common carriers of passengers and freight. These laws relate to various things including the obligation of the operator to prove the public convenience and necessity of the service that is being opened; regulation of accounts; issue of shares and compulsory insurance; regulations relating to safety, size and speed of the vehicles.

As in railways the use of diesel power for trucks and buses is increasingly coming in vogue. However, gasoline consumption for 1949 had reached the high figure of 36,835 million gallons. In 1950 motor vehicles covered an estimated total mileage of 4,50,000 million.

## PUBLIC PASSENGER TRANSPORT

Public passenger transport by road falls in two main classes, *viz.*, inter-city transport and "community transit". The former is subject to the control of the Interstate Commerce Commission only when State boundaries are crossed. The latter is governed by their respective city or town authorities. In the last fifteen years or so motor buses in the U.S.A. have more than doubled in number and in 1950 there were 2,18,000 buses in operation. About a third of these are owned by public bodies and are used for some specific purpose, such as the transportation of school children.

One-third of the total number of buses are employed in community transit, *i.e.,* the local passenger transport systems of towns and cities and their immediate suburbs. About 30,000 buses are used in inter-city transport, *i.e.,* between cities and towns and between points on the open highway.

In 1950 there were about 3,000 enterprises engaged in providing inter-city transport. But only 1,200 of these were regulated by the Interstate Commerce Commission. There are about 65,000 employees in the service of the 3,000 enterprises, with a total pay roll of $ 200 million. The gross revenue of these companies was estimated at $ 500 million for 1950. There is a severe competition among these operators with the result that though the operating costs have increased by 110 per cent since 1941, the fares have risen only by one-third. This is partly due to the fact that in some cases the fares are controlled by the Interstate Commerce Commission.

Local or urban passenger transport is provided by some 1,475 town and city bus and trolley organizations. There are about 6,338 trolley cars covering an estimated city and suburban track of 1,744 miles and 57,035 buses covering roughly 42,141 miles. In 1949 the total operating revenue from these buses was $ 758 million and $ 112 million from trolley cars. About 1,40,000 persons are employed on buses and 15,000 on trolley cars. The total pay roll of these two types of organizations is estimated at $ 496 million or 57 per cent of their gross revenue. It is said that labour costs are highest in this section of the transport industry.

## FREIGHT TRANSPORT

The road haulage is one of the major industries of the U.S.A. It is also called the "trucking" industry. In 1950 there were about 8.6 million registered trucks. As many trucks are owner-driven it is not possible to find out the total number of operators in this business. But in 1950 there were 21,000 operating companies which were subject to regulation by the Interstate Commerce Commission. These had a total fleet of 9,50,000 trucks. Many of these companies have developed 'long-haul' operations in 'for-hire' trucking. This development has aroused considerable opposition from the railways. Many amalgamations have been taking place in this industry recently. A problem which is facing this industry is the lack of co-ordination between States in respect of regulations as to maximum loads and size of vehicles. Each State has its own laws in this regard. This problem is receiving the attention of the Senate Interstate and Foreign Commerce Committee at present.

## ROAD-RAIL COMPETITION

Motor transport possesses certain advantages over rail transport. Motor transport has greater speed and freedom to pick up and unload. It is not again bound by fixed time-tables. It can effect door-to-door delivery, maintain personal contact with the customers. The formalities are fewer. There are possibilities of effecting sales transactions and transport as a single operation.

Motor transport suffers from certain disadvantages also. It is not suitable for all types of goods. Distance is also a limiting factor. An important problem in determining the cost of motor transport is that of return load. The railways enjoy a distinct advantage over motor transport in this respect. They can store goods in transit in their warehouses. The railways further can offer special facilities, when goods require to be transported by specially equipped vehicles.

We have noted earlier that in the U.S.A. motor transport is less strictly regulated than rail transport. For instance, the tariffs of motor transportation are very loosely regulated. Common carriers are as a general rule required to file their tariffs, but their publication is not compulsory. Such regulations apply mostly to large common carriers, though recently attempts are being made to bring the contract carriers also within the scope of these regulations. The tariffs have either no classification of goods, or only a very loose classification. Different carriers discriminate between shippers, goods, lots, etc. The frequent changes in tariffs and seasonal arrangements lead many times to traffic disorganization. In the classes of freight or on routes where the motor transport operators do not fear competition from the railways they raise their tariffs unhesitatingly.

As far as passenger traffic is concerned it is very difficult to determine the extent of motor transport competition. But it may be noted here that the railway passenger traffic has been more affected by growing competition from private cars than by motor-bus services.

As far as haulage is concerned the road-rail competition is the keenest within a radius of 50-75 miles. It continues to be serious up to a distance of 200 miles. Certain recent researches show that the railways experience the effects of this competition even up to a distance of 1,000 miles. Motor transport takes away almost all traffic of goods which represent less than a complete car-load. Motor vehicles are also making serious inroads into the car-load traffic of the railways. The traffic which is diverted from the railways to motor transport consists of live stock, meat, dairy products, fruits and vegetables, cotton and coal.

The railways have tried a number of devices to meet this competition. The technical measures have been, (*a*) improvements in the actual operations of transport, like increasing the speed of the trains, the introduction of short light trains; employment of rail-cars in the place of local trains; (*b*) improvements of service; such as extension of the hours for shipment and delivery of goods; opening of night services for handling goods; (*c*) employment of special forms of equipment to facilitate handling of goods, *e.g.* containers, truck bodies, and rail-wagons; (*d*) reduction of the number of transport documents.

The railways also organize their own motor-bus services. The three principal methods of this organization are : (*i*) substitution of motor services for unprofitable train services; (*ii*) extension of feeder services to areas not reached by rail, and to small towns situated between two important railway stations, or opening services at harvest seasons; (*iii*) independent services operated by the railways.

Some railway companies operate their own motor transport services as part of their normal transport business. But if this method is adopted these services come under the control of the Interstate Commerce Commission, with the result that any advantage of operating a bus service is lost because the bus service of the railway would be a regulated one and it would have to compete with non-regulated bus services. This method, therefore, is not very popular. What most of the railway companies do is to start a subsidiary company to operate a bus service. Such subsidiary companies are not subject to many regulations which would apply to the railways. Hence they can compete on an equal footing with the independent companies. Yet another method is for a railway to acquire a holding in existing motor companies. The fourth method of operating a bus service is to enter into contracts with independent motor transport enterprises for the operation of certain services.

The railways have attempted to meet motor transport competition by taking a number of tariff measures. They have not lowered their basic tariffs but have introduced a number of special tariffs, which have the effect of lowering the freight rates. This takes various forms. It may be done by a pure and simple reduction of rates. In some cases, special classifications have been introduced for certain goods. During summer reduced-rate return ticketsa re issued. Concessions are offered to persons attending meetings and congresses, etc. The railways are at a disadvantage in the matters of tariffs, as they have to publish all changes of tariffs; this gives the competing motor companies sufficient breathing time to consider counter-measures.

Road transport is not merely competitive but also complementary. In the U.S.A. the motor car has brought a considerable increase of traffic to the railways. The motor car manufacturing factories require huge quantities of building material; machinery and other things. Raw materials going to the factories and finished products going either to the assembly plant or the market create traffic for the railways. Large quantities of petrol have to be carried from the refineries. The development of the highway system has created a huge demand for transport of stone, gravel, cement and sand. All these materials are carried by the railways.

In the thirties the Interstate Commerce Commission held extensive hearings on the question of co-ordination of railroad transportation. It came to the conclusion (1932) that there was an excess of carrying capacity of existing transport facilities. The excess was due to the freedom with which the motor car had been allowed to develop and create competition. According to the Commission the rail-road competition was operating under conditions of inequality which were favourable to motor transport. The Commission thought it reasonable that whenever motor transport rendered better service it should replace the railways and that such a transformation should be encouraged wherever it seemed conducive to progress. It was also of the opinion that Federal legislation relating to the regulation of motor vehicles operating on the public highways and engaged in Interstate Commerce was desirable in the public interest.

## INLAND WATERWAYS

The U.S.A. has some 27,500 miles of inland waterways excluding the waterways provided by the Great Lake system. Of these the Mississippi River, with its 30 odd navigable tributaries is the most important system. This system alone accounts for 12,000 miles of waterways. It has 26 dams and the system is regarded as a triumph of engineering and maintenance. Still, the river as such is not yet "tamed";

nevertheless its navigable channel is consistently maintained at a minimum level of nine feet. The system extends from New Orleans in the South, to St. Paul and Minneapolis in North West and Pittsburgh in the North East. The upper reaches of the Mississippi River system are navigable for only 8 months in the year. The Corps of Engineers of the U.S. Army is responsible for the actual physical development and maintenance of the waterway network and for flood control. The inland ports and their management are the responsibility of the particular city of State authority concerned.

Other important waterway systems in the country are the Illinois waterway connecting the Mississippi with the Great Lakes; the New York State barge system; the Hudson River in New York State; and the Columbia River System in the Pacific North West. There are two important intra-costal waterways systems of the Gulf and the Atlantic.

As in road transport, here too, the Interstate Commerce Commission has jurisdiction only over common carriers and some contract carriers when they are engaged in inter-state commerce. This fact has created a problem of the co-ordination of road, rail and water freight rates. The railway companies and truck operators are subject to the control of the Interstate Commerce Commission. One carrier has tried to bring together water and road transportation and to eliminate costly transfers in handling goods by the use of containers and loaded trailers. The Interstate Commerce Commission gave sanction for this method despite vigorous opposition from the railways and road undertakings.

## ROAD MILEAGE IN RELATION TO AREA AND POPULATION IN DIFFERENT COUNTRIES

| | Area 000 square miles | Population in lakhs | Road Mileage 000 miles | | | | Road Mileage Per 000 square miles of area | | | Road Mileage per lakh of population | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Year | Surfaced | Unsurfaced | Total | Surfaced | Unsurfaced | Total | Surfaced | Unsurfaced | Total |
| 1. India ... | 12,41 | 3618.20 | 1947 | 90.6 | 150.6 | 241.2 | 73.0 | 121.3 | 194.3 | 25.1 | 41.6 | 66.7 |
| 2. U.S.A. ... | 30,27 | 1492.15 | 1948 | 1503.8 | 1505.2 | 3309.0 | 496.8 | 497.3 | 994.1 | 1007.8 | 1008.74 | 2016.54 |
| 3. U.K. ... | 94 | 503.63 | 1948 | 183.4 | negligible | 183.4 | 1951.1 | ... | 1951.1 | 364.2 | Nil | 364.2 |
| 4. Germany | 1,81 | 475.85 | 1939 | N.A. | N.A. | 262.9 | N.A. | N.A. | 1452.5 | N.A. | N.A. | 552.5 |
| 5. Japan ... | 1,47 | 826.36 | 1939 | N.A. | N.A. | 591.8 | N.A. | N.A. | 4025.9 | N.A. | N.A. | 716.2 |
| 6. U.S.S.R. ... | 81.76 | 1930.0 | 1939 | N.A. | N.A. | 1682.0 | N.A. | N.A. | 205.7 | N.A. | N.A. | 871.5 |

Source : Transport Communications, Oct., 1952.

## SHIPPING IN THE UNITED STATES

The shipping of the U.S.A. was continuously declining since the Civil War. In 1891 the Postal Law was enacted which authorized the award of mail carrying contracts to American vessels. But the amount of this subsidy was very small indeed and it failed to help. At the same time shipping in other countries was fast developing under Government subsidies. The Panama Canal was opened to navigation in August 1914. But it was soon closed and opened later on in July 1920. The opening of this Canal gave American shipping interests some hope. They could compete on better terms with foreign shipping companies in respect of through-the-Panama-Canal-trade, as the foreigners had to pay higher Canal toll.

However, the first World War drove home to the Congress and the shippers the need to awaken and do something. At this time, the total American tonnage was hardly one-tenth of British tonnage and less than half of the tonnage of Germany, or Norway or France. The war brought about a withdrawal of foreign tonnage. American trade was disorganized, prices of export goods collapsed and freight rates sky-rocketed. America was not prepared for any naval emergencies which the war might have produced.

As an answer to the difficult situation, the Shipping Act was enacted on September 7, 1916. This was an honest aid to shipping. The Act established the U.S. Shipping Board for creating and developing a naval auxiliary and naval reserve and a merchant marine. The Board was also intended for regulating sea transport. The U.S. Shipping Board Emergency Fleet Corporation with a capital of $ 50 million was chartered under the Act for the purchase, construction, equipment, lease, charter, maintenance and operation of merchant vessels in the trade of the U.S.A. The task of the Corporation was difficult. It had not only to supply the ships needed for carrying the normal commerce of the

U.S.A. but also to provide thousands of tons of ships required for overseas military and naval campaigns. The Emergency Fleet was an utter failure. Ships were built in great haste for the need of the hour and they were so very badly constructed that they were scrap from almost their birth.

The emergencies of the war forced the Board to take up the work of providing ships for naval purposes, and later on it had to undertake a large-scale operation of liquidation of the fleet acquired for the purposes of the war. The Board had at one time under its control 4,500 ships with a total tonnage of 24,500,000. This number was reduced to 3,400 vessels at the time of the Armistice.

The following figures will give an idea of the proportion of useless vessels under Government ownership.

| *Year* | | *Ships Owned & controlled* | *Active Vessels* |
|---|---|---|---|
| 1923 | ... | 1,357 | 438 |
| 1924 | ... | 1,301 | 448 |
| 1925 | ... | 1,245 | 335 |
| 1926 | ... | 1,013 | 294 |
| 1927 | ... | 822 | 307 |
| 1928 | ... | 758 | 253 |
| 1929 | ... | 613 | ... |
| 1930 | ... | 482 | ... |
| 1931 | ... | 390 | 138 |
| 1932 | ... | 371 | 81 |
| 1933 | ... | 317 | 38 |

By 1919, 41 regular sailing routes were established by ships flying the U.S. flag. But from 1920 the demand for shipping was falling off and the charter rates fell in consequence. After the war the Shipping Board was empowered by the Congress to offer American shippers[1] advances from a revolving construction-loan fund of $ 125 million. Loans were to be granted to those shippers who got their ships constructed in an American shipyard. But on account of higher costs of American labour the American shippers could not compete with the foreigners. The fund was enlarged between 1920 and 1928. In addition, the payment of mail subsidies was started again.

---

[1] In this Section the term shippers should be taken to mean shipping Companies.

In June 1920 the Jones Act was passed. Its object was the maintenance of a merchant marine of the best equipped and most suitable type of ships to carry the greater portion of American commerce and also to serve as a naval or military auxiliary in time of war or national emergency, and ultimately to be owned and operated by the U.S. citizens. The Shipping Board was maintained and all the Government owned vessels were transferred to it. These were to be sold to private interests but if possible to Americans. The Act gave the Board powers to determine what steamship lines should be established from the U.S. ports, the type of vessels to be used and the frequency of their sailings. The Board was authorized to operate ships itself in cases where no U.S. citizens were found to buy or charter them. The Board could spend an amount not exceeding $ 25 million per year to aid construction of suitable vessels in the U.S.A.

The Act of 1916 had already prohibited the use of deferred rebate system by American shipping companies or owners. The Act of 1920 prohibited the use of *fighting ships* (a method used for driving out other carriers out of particular trades) and retaliation against any shipper by refusing accommodation when available, and other kinds of discrimination. The coasting trade was already reserved to American shipping. This Act of 1920 enlarged the definition of coasting trading to cover island territories, except temporarily, the Philippines. It also provided that as far as possible all U.S. mails should be carried in American-built and American registered vessels.

Two sections of the Jones Act, if put into practice, would have violated international shipping code and international shipping relations. One section permitted the granting of preferential rates over the railways to freight exported or imported in American ships. The other directed the President to terminate treaties which restricted the right of the U.S.A. to impose discretionary customs duties on imports entering the United States in foreign vessels.

The report of the Shipping Board in 1926 made it abundantly clear that there was an urgent need for a legislation for direct or indirect Federal aid, without which a privately owned and operated merchant marine for carrying U.S. foreign commerce could not be successfully established. This aid was needed to overcome the severe handicaps under which American shipping had to operate. These handicaps were higher costs of construction, repairs and operation; stricter boiler inspection service; system of measurement of tonnage which resulted in 20-30 per cent higher dues to be paid by American ships; higher taxation for all repairs done in foreign harbours; the system of wage payments to the crew, etc.

A new Merchant Marine Act was passed in 1928 which empowered the Shipping Board to grant loans for the construction of up-to-date ships and modernization and re-equipment of existing ships. It further provided that the U.S. mail should be carried only in ships of American construction or registry. Employment in shipping services was to be of American citizens only. Government officials on duty had to travel by American ships only. The Act provided that the Government could requisition for national defence in an emergency any ship in respect of which a loan or mail contract was given.

This Act thus gave a new lease of life to the American shipbuilding industry. Despite the heavy cost of this aid this measure had popular public support. The Shipping Board sold to the public a large number of ships at very low prices, which hardly covered a small proportion of the construction and reconditioning costs. The Board also operated its own fleet at heavy losses. It also advanced substantial sums to ship-builders. Further, the mail contracts were a disguised form of subsidy enjoyed by the shipowners. The Government policy was supported on the grounds that there was nothing new or dangerous about shipping subsidies. Every other maritime nation had created and maintained its shipping by such Government subsidies. It was also argued that subsidies were universal and necessary in America as the American standard of living was higher than that of other countries. "The man in the street in America accepted the arguments which had been advanced by so many countries besides his own on the credit side of a mercantile marine and, in accordance with the prevailing spirit of economic nationalism, added that as foreign Powers were building 'uneconomical' ships why should the first Power in the world, moreover possessed of the largest resources, stand tamely aside ?"[1]

The mail contract scheme was investigated into by a Senate Committee in 1935. The report to the President of the Postmaster General also brought to light extravagances and waste resulting from the mail contracts without any appreciable benefit to the American mercantile marine. Later the President in his message to the Congress stated that lending money for shipbuilding had in practice been a failure; few ships had been built and many difficulties had arisen over the repayment of the loans.

Following the message bills were introduced in both the houses. After a stormy passage they were incorporated into a Merchant Marine Act of 1936. The original bill aimed at the U.S. fleet carrying 50% of the country's foreign trade, but the Act emerged with assigning the fleet the vague purpose of carrying a 'substantial portion' of the trade.

The Shipping Board was dissolved and a new United States Maritime Commission was created to 'study, perfect and adopt a long-range programme of replacements and additions to the American merchant marine, so as to create an adequate and well-balanced merchant fleet, including vessels of all types to provide shipping services on all routes essential for maintaining the flow of foreign commerce to the United States, the vessels in such fleet to be so designed as to be readily and quickly convertible into transport and supply vessels, in a time of national emergency.'

---

[1] Sir Osborne Mance, International Sea Transport, p. 86,

The Act contemplated this fleet to be operated by American citizens. The Commission was entrusted with various other matters, such as, ocean routes and services; foreign competition; comparative costs, in the U.S.A. and other countries, of construction, insurance, maintenance, repairs, wages and subsistence; foreign subsidies and other governmental aid; facilities in aid of U.S. shipping; and application of the Act to air commerce and technical progress. The Commission was also to find ways and means of popularising the use of American ships by U.S. exporters. It had also to study the question of scrapping of obsolete tonnage and of U.S. participation in tramp services. The Commission was to ensure minimum manning scales, minimum wage scales and reasonable working conditions for officers and crews on American ships. The Act tightened the provisions regarding American nationality of crews. The Act provided for the termination of all existing mail contracts on 30th June 1937. The manner of granting subsidies in different forms was laid down in great details. The Commission was empowered to construct ships; to sell them; to charter them; and also to operate them. The whole purpose of the Act was to provide an adequate merchant marine, even by the provision of subsidy, but avoiding at the same time the abuses and scandals of the administration of the previous Act.

The U.S. Maritime Commission issued in November 1937 an exhaustive Economic Survey of the American Merchant Marine. This survey report first analyses the relation between the State and shipping. Shipping, according to them, was not a business in the usual sense of the term, but it was an instrument of national policy maintained at considerably large cost to serve the needs of commerce and defence. As it required Government aid, Government control was inevitable. The outcome of such a situation was inflexibility, curtailment of investment, and further need for subsidies. The report said that the military requirements, such as uneconomic speeds and extra bulkheads tended to reduce the carrying capacity of the ships. They concluded that, 'the maintenance of an uneconomic merchant marine contributes to the erection of trade barriers and therefore tends to decrease the total volume of world trade'.

The Commission outlined two considerations which justify the expenditure of public funds to maintain a foreign going fleet by the country. These were firstly, the importance of shipping as a factor in foreign commerce; and secondly, the relationship between merchant vessels and national defence. The Commission concluded that it was important to maintain a merchant marine of some proportions in the international carrying trades. They thought that the development of an American merchant fleet after 1918 had facilitated the striking increase in American foreign trade. Before the first World War American foreign trade was hampered by indirect transhipment services, insufficient sailings, inferior vessels, lack of regularity, and concentration of lines at too few American ports. The establishment of regular American line services on the long-voyage overseas trade routes had removed some of these handicaps. Dependence on foreign lines was not desirable because it meant dependence of lines of countries which were naturally interested in their own trade. Although the Commission opined that discrimination against America was not practised on a large scale, yet they warned that an increase in nationalized shipping might increase the possibilities of such a discrimination.

The Commission recommended the concentration of shipping in the following routes in order to meet the requirements of American foreign trade :

| | | |
|---|---|---|
| South America & West Indies ... | 7 | routes |
| Africa ... ... ... | 4 | ,, |
| Europe ... ... ... | 4 | ,, |
| The Philippiness & Far East ... | 3 | ,, |
| Mediterranean ... ... | 2 | ,, |
| India ... ... ... | 1 | route. |

The Commission also concluded that tramp shipping was not the proper field for American shipping. As regards superliners the Commission belived that they were economically unsound and extravagant, and vulnerable to air competition.

In the report the Commission stated that in 1937, excluding tankers, the subsidized fleet carried only 16·6 per cent of the U.S. foreign trade, 12.6 per cent was carried in unsubsidised bottoms and 70.8 per cent in foreign bottoms. Only 35.7 per cent of the total U.S. foreign commerce was carried in American ships. The Commission found that most of the subsidized companies were not doing well and thought that fewer but larger companies were needed. They also found that the American merchant fleet was obsolescent and from the point of view of national defence a bulk of it needed to be replaced. If all the obsolete ships were to be replaced by 1942, the Commission calculated that an average of 261 vessels or about 1.5 million gross tons would have to be constructed per year. The Commission recommended that construction subsidies should be reduced allowing ships to be constructed in foreign yards, in cases where the foreign construction costs were between 33⅓ per cent and 50 per cent below the U.S. costs.

Following this report a bill was introduced to amend the Merchant Marine Act of 1936. The amending Act was passed in June 1938. The objectives of the bill were :

(*i*) to extend the provisions of the Act to aircraft construction and operation;

(*ii*) to improve the working conditions of American seamen;

(*iii*) to tighten up the subsidy regulations; and
(*iv*) to allow ships to be built in foreign countries when American costs were unreasonably high.

The amending Act, however, did not include any provisions regarding the first and the fourth objectives. It set up a National Maritime Labour Board. It also created a fund for insuring mortgages for shipping construction for domestic trade up to a total of $ 200 million.

As international tension increased, the Commission accelerated their building programme in 1939 and when the war broke out in September, it had given orders for 141 vessels out of a programme of 500. At this time the U.S.A. possessed some 11½ million deadweight tons of shipping; of this only 9 million was active, the rest being idle or laid up. The war emergency speeded up the shipbuilding programme. During the war, six million deadweight tons of shipping was constructed annually. By 1949 the U.S.A. had an ocean-going merchant marine totalling 59 million deadweight tons. This was more than five times of the total tonnage in 1939.

Most of the fleet before 1939 was in an obsolescent condition and was used mainly for coast-wise and inter-coastal trades. The post-war fleet was mostly Government owned, built with Government funds. It included about 8½ million tons of ships requisitioned from private owners. Most of the post-war fleet was engaged in overseas trade and consisted chiefly of standardised dry cargo types of vessels. Though such types of vessels enjoyed the advantage of speed and newness, it was unbalanced and not suitable for meeting normal commercial conditions and the competition of other maritime nations.

For some time after the war the U.S. fleet was in full and active employment and to a certain extent relieved the needs of war devastated countries. But soon this merchant marine lost its position. The Postwar Planning Committee set up by the Maritime Commission in 1943 reported in June

1946 saying that not more than 11 million deadweight tons of ocean-going shipping could find economic employment in the post-war world. The Committee estimated that of this about 500,000 tons of shipping could find employment in tramp trading. We have noted earlier that before the second World War the U. S. A. had frowned upon this business as unsuitable.

The post-war period saw the American merchant marrine faced with a drastic fall in cargo, higher cost of operation and a fast reviving foreign competition. In 1947 the Government introduced operating differential subsidies to American ships plying on essential trade routes. It must be noted here that the operating differential is due mainly to higher wages of American seamen and better amenities and service conditions. The basic wage of an able American seaman is more than three times of a British seaman doing similar job.

In 1951 American shipping had fallen from a wartime peak of 59 to only 16½ million deadweight tons, of which about 85 per cent was privately owned. The Postwar Planning Committee had considered 11 million deadweight tons as the probable capacity that would find economic employment in the post-war period. This difference between the estimate of the Committee and the present capacity of shipping in active employment shows that there is a world-wide demand for shipping even in disturbed times.

The Ships Sales Act of 1946 provided for the re-acquisition of ships by their former owners or other American citizens and also for the purchase or charter of war-built tonnage. This inaugurated the re-establishment of a privately owned and operated merchant marine. This authority of selling war-built tonnage expired on 15th January 1951. By then 843 ships with a tonnage of about 9½ million had passed from Government to American private ownership. The ships sold under this Act brought the Government about 1,727 million dollars. This disposal accounted for nearly 40 per cent of the immediate post-war fleet.

Since the end of the war there has not been any material addition to the privately owned dry cargo fleet. Despite the existence of the construction differential subsidies, the deterrent costs of domestic construction have failed to encourage private orders. As a result of an increased demand for oil, however, the U.S. tanker fleet has been strengthened by the addition of 11 new and fast vessels of 2,42,000 deadweight tons. American tanker operators have also placed large orders in foreign yards and the tankers constructed there would be placed under foreign registry to take advantage of the lower operating costs.

The American merchant marine fleet still lacks balance and requires addition of passenger ships. Recently, three passenger-cargo ships were under construction. An addition of 5,000 berths capacity was expected. But meanwhile the military authorities took over these ships.

The post-war shipping policy in the U.S.A. is largely coloured by the needs of defence. The shipping authorities fear that the available shipping might not meet the demands of another emergency, in spite of the fact that the present fleet is larger and younger than the fleet in 1939. The Government have, therefore, launched a vigorous shipbuilding programme for which appropriations of $ 300 million were made in January 1951. Such a programme is also intended to revive and retain shipbuilding skill and preserve the ancillary services of ship repairs and maintenance.

In the post-war years, shipping legislation has been in the main protective, in view of the reviving foreign competition and the higher construction and operating costs at home. One form of protection to U.S. shipping has been the application of the subsidy provisions of Merchant Marine Act of 1936, which aim at putting American ship operators on a parity with their foreign competitors. The other form of protection has taken the form of reservation to U.S. ships of a proportion (usually 50%) of the cargoes arising out of foreign aid programmes, whether in the form of grants or loans.

The construction differential subsidies have not proved to be a sufficient incentive to keep the American shipyards busy, in spite of the fact that the scales of subsidies are higher than in the pre-war period. According to the estimates of the Maritime Commission the total net operating subsidies paid during 1947-1950 (inclusive) amounted to about $ 80 million.

Before the war, the entire coastal and intercoastal trade, the carriage of supplies for the U.S. armed forces, the carriage of cargoes arising out of loans of the Export-Import Bank, etc., were reserved for American ships. This form of protection to American shipping was extended in post-war years to the several recovery and defence programmes, including Marshall Aid and Mutual Defence Assistance. It is provided that up to 50 per cent of the cargo under these programmes must be carried in American bottoms.

In November 1950, Mr. Gordon Gray in his report on Foreign Economic Policies to the President recommended that the U.S. should limit the use of Government subsidies or other protective measures to the amounts necessary to maintain the operation of shipping facilities required for national security, and should enter into negotiations with other governments with a view to the removal of cargo preferences and other similar types of discrimination. These recommendations could not be considered on account of the Korean War and the needs of the U.S. defence programmes. The U.S. Government has, however, lodged diplomatic protests with the Governments of countries which were not formerly considered maritime nations, and which have been trying to build up national fleets by the introduction of discriminatory practices.

In 1950 the Maritime Commission which was set up by the Merchant Marine Act of 1936, was abolished. It had come under severe criticism from various quarters for some years. A new three-member Federal Maritime Board, with a Federal Maritime Administrator, as its ex-officio chairman, has been created in place of the Commission to take up its subsidy, regulatory and other functions. The Administrator and the Board have to work under the newly created Under-Secretary of Transportation in the Department of Commerce. However, in regulatory matters they are independent of the latter.

AMERICAN FOREIGN TRADE CARRIED BY AMERICAN AND FOREIGN VESSELS.
1921-1948 (*percentage*)

| *Year* | | *Carried in U.S. Ships* | *Carried in Foreign Ships* |
|---|---|---|---|
| 1921 | ... | 49 | 51 |
| 1922 | ... | 48 | 52 |
| 1923 | ... | 40 | 60 |
| 1924 | ... | 41 | 59 |
| 1925 | ... | 37 | 63 |
| 1926 | ... | 32 | 68 |
| 1927 | ... | 38 | 62 |
| 1928 | ... | 38 | 62 |
| 1929 | ... | 38 | 62 |
| 1930 | ... | 38 | 62 |
| 1931 | ... | 36 | 64 |
| 1932 | ... | 35 | 65 |
| 1933 | ... | 33 | 67 |
| 1934 | ... | 33 | 67 |
| 1935 | ... | 32 | 68 |
| 1936 | ... | 30 | 70 |
| 1937 | ... | 27 | 73 |
| 1938 | ... | 26 | 74 |
| 1939 | ... | 22 | 78 |
| 1947 | ... | 52 | 48 |
| 1948 | ... | 42 | 58 |

---

Source: U.S. Maritime Commission. Quoted by Enke & Salera, International Economics.

## CIVIL AVIATION IN THE U.S.A.

In this country the mail was officially carried by an airplane for the first time in September 1911. This was on an experimental basis. Up to 1926 nearly all scheduled air transport was under the operation of the Post Office. Private capital did not interest itself in air transportation as a field for investment. Passenger flying began in 1928. It was only in 1935 that the total revenue from passengers and express exceeded mail payments paid by the Post Office. Thus until the end of World War II development of air transport depended upon Government policies towards carrying of air mail. There were, however, merchant adventurers and gypsy fliers, as well as companies operating from fixed base on charter and air-taxi work.

In 1924 an aircraft of the U.S. Army made a round-the-world flight. The army air craft also staged demonstrations throughout the country to stimulate public interest in civil aviation and to make them air-minded—to make America air-conscious. It was long since recognized in the U.S.A. that air transportation should be regarded as a business, in the development of which the vital factors were public interest, financial backing and government help. It was perhaps due to this attitude that America did not participate in the International Air Commission. The Americans regarded the International Air Convention as a by-product of the League of Nations. They also thought that military and political rivalries between nations tended to compromise the freedom of innocent passage. Besides they did not want external rules and regulations, which appeared to them burdensome and overdone, to cramp their own development of air transportation.

From 1925 began the development of American air transport, as it exists today. The Kelly Act of that year authorised the Postmaster General to contract with any individual firm or corporation for transportation of air mail between such points as he might designate, at a rate not to exceed four-fifths of the revenue derived from such mail, and further to contract for the transportation by aircraft for first-class mail other than air mail at a rate not to exceed four fifths of the revenue derived from such first-class mail." Under this new powers the Postmaster General made an important provision by which contractors might carry packages and passengers, but must give preference to air mail on all trips. Further, it was provided that such emergency landing fields, radio stations, and other aids to navigation, as might be necessary for the proper navigation of aircraft should be provided by the contractors. These provisions were changed later on, but at this time the policy emphasised the principle that the same service should carry passengers, freight and mail, with mail getting priority. It should be noted that in spite of the fact that at this time there was not in existence a Federal authority for the control of commercial aviation, there was no dearth of adequately financed and soundly organised contractors. And as many as eight air mail contracts were awarded by the Postmaster General.

The Air Commerce Act of 1926 was very beneficial to the air transport industry. By this Act a Bureau of Commercial Aviation was established under the Department of Commerce. Its function was to control and develop civil aviation. Henceforth, the responsibility of the development of air routes and the provision of navigational aids was that of the Government and not the private contractors. A new division of the Bureau of Standards was opened for the perfection of navigation aids. The Bureau was to act in co-operation with the Guggenheim Foundation (named after Deniel Guggenheim who had given munificent donations for the promotion of aeronantics), the Army Air Service and other Government departments.

By the end of 1928 there were 33 contract routes which covered 14,155 miles. At this time 7 more contracts were awarded. In most of the larger American cities, there were non-contract services in operation.

The Kelly Act had also authorised the Postmaster General to give foreign air mail contracts. The Act opened up possibilities for private profit. This as well as the growing public interest in civil aviation attracted American high finance to this industry. This was evidenced by a general movement towards groupings, amalgamations and the formations of financing and holding companies. Some of these amalgamations included both aircraft manufacturing and operating activities. American enterprise in this field made important investments also in Central and South America, China and West Indies.

The guiding principle of the Kelly Act was that air mail services could be operated without direct loss to the Government. The air mail contract scheme was an attempt to find a middle way between the direct subsidy system and making commercial aviation fly by itself. In the first few years of the operation of the scheme most of the carriers were operating at a loss, while the postal revenue exceeded the payments to them. In 1930, the Watres Act was passed. It based compensation to carriers on mileage flown, with space reserved for mail, rather than on the actual volume of mail carried. Under this Act the compensation was related to the cost of operation rather than to actual mail traffic. It was outright subsidy but very ingeniously employed.

This policy of subsidizing air transportation industry was defended on the ground that it was necessary to foster competition in such a way as to bring the aeronautical industry up to a point where it could finally sustain itself.

On the eve of the New Deal there were 34 air mail routes covering 27,062 miles. The aircraft used on domestic airlines was the most up-to-date and luxurious. Passenger traffic was fast increasing at a rate of 5,00,000 a year. Ladd Smith wrote, "Despite this impressive record, commercial aviation went into a tail spin............ Before the New Deal was a year old, the air mail situation had developed into a scandal". Many important contracts had to be cancelled.

It was alleged that a few favoured corporations got all the air-mail appropriations as a result of corruption, favouritism and illegal grants. As soon as he took office President Roosevelt ordered a Senate inquiry in the affairs of this industry and on its recommendations cancelled all air mail contracts in February 1934. He also ordered the army to take over the carriage of mail.

A reorganization of the whole industry was undertaken and those who were found guilty of abuses were debarred from getting the air mail contracts. The Government barred monopolies and the operating concerns were separated from aircraft manufacturing companies. Rates were altered and air mail contracts were resumed in April 1934.

In June 1934 the Black-McKellar Act or the Air Mail Act, 1934 was passed by the U.S. Congress. This statute repealed all previous laws. The law authorised the Post Office to continue awarding air mail contracts and fixing routes and schedules. But the rates were to be decided by the Interstate Commerce Commission. The control of airways, personnel and equipment was retained in the hands of the Bureau of Air Commerce. The Act authorised the establishment of a Federal Aviation Commission, whose function was to devise a more effective aviation policy. This Commission later recommended the enactment of a new legislation. This was the McCarran-Lea Act or the Civil Aeronautics Act of June 1938.

This was a very important piece of legislation. It created the Civil Aeronautics Authority under an Administrator and a Board of five members. Another three-man Air Safety Board was appointed to co-operate with the Civil Aeronautics Authority. The Authority was empowered to issue certificates without which the airlines could not operate. This power enabled it to check unnecessary competition. The payment of freight and the determination of the schedules was left to the Post Office. The Authority also had the power to examine accounts, to investigate mergers, interlocking directorships, pools, federal loans and inter-line agreements.

## PRESENT POSITION OF U.S. CIVIL AVIATION

Civil Aviation in the U.S.A. is still governed by the Civil Aeronautics Act of 1938. From time to timethe President appoints specialist committees to report to him on this behalf. One of the reasons of the U.S. leadership in air transportation is the use of experts. Civil aviation in America is in the hands of people who know their jobs. The keymen in American air transport are persons who have served a long and varied apprenticeship, beginning in the early days of merchant adventurers. There are also the Air Co-ordinating Committee and the National Advisory Committee for Aeronautics for advising the President on all matters relating to civil and military aviation. The other Government departments concerned with aviation are : the Civil Aeronautics Administration; the Coast and Geodetic Survey; the Weather Bureau; the Aviation Division of the Department of State; the Federal Communications Commission; and the Post Office Air Mail Service.

After the second World War there was an all-round expansion of domestic air services. This expansion was witnessed in the regular routes, those offered by non-scheduled airlines, as well as those operated by companies which concentrated only on cargo work. The expansion was more rapid in comparison to the avilable facilities. The equipment, navigational and other aids were certainly insufficient to handle the increased traffic. This together with bad weather conditions in 1947-48 and a number of fatal accidents greatly affected passenger traffic. Thus the American carriers went through an economic distress during 1948 and 1949. The airlines had spent their funds on buying costly aircraft and their overhead costs were exorbitantly high. With traffic receipts very low many of them were on the verge of financial collapse and the situation was saved only by extensive borrowing from banks. The improvement in weather conditions, navigational aids, equipment and the introduction of new aircraft eased the situation from the middle of 1949. In 1949-50, the airlines were once again on their feet. From 1950 the airlines began to show some profits even if air mail subsidy was excluded.

After the war the inter-city feeder line operations were once again started. These are designed to link up the areas which are not covered by the major operators. These operations, however, had to be heavily subsidized. Helicopter services are also proving successful in the U.S.A. Helicopter mail operations have been introduced in Los Angeles and Chicago. A helicopter air mail network is being introduced in New York.

The international air services of the U.S.A., *viz.*, the Pan-American and Trans-World Airlines, showed great expansion over the pre-war levels. International routes have to be certified by the Civil Aeronautics Board. In 1941 there were 3 airlines with such authorisation. Now 14 airlines have been authorised to conduct scheduled international services, involving 250 points on international routes and a route mileage of 1,81,000. Since December 1944 the U.S.A. has signed 43 bilateral air transport agreements with different countries. At present 19 countries are authorised to serve the United States.

The aircraft industry fell on hard times immediately after the second World War. The military disposals at cheap prices and the drastic cut in the military programme of aircraft manufacture resulted in a steep fall in the earnings of this industry. In 1946 and 1947, the aircraft manufacturers were over-optimistic about the prospects of the industry in the hope that those who had flown during the war would continue to do so. This resulted in a poor financial position for the manufacturers. The situation continued without much change till 1950.

| *Year* | *Total Civil Aircraft Constructed* |
|---|---|
| 1940 ... ... ... | 6,785 |
| 1946 ... ... ... | 35,001 |
| 1947 ... ... ... | 15,617 |
| 1948 ... ... ... | 7,302 |
| 1949 ... ... ... | 3,379 |
| 1950 (10 months) ... | 3,100 |

# TRANSPORT IN JAPAN

## JAPANESE RAILWAYS

Being an island and having a mountainous country coast-wise navigation in Japan is more important than land transport. Hence, both rail and road transport have not developed to the same degree as in other advanced countries of the world.

However, Japan has an efficient railway system throughout the four main islands. The mountainous nature of the country necessitates the main trunk line in Honshu to follow the east coast, but there is a subsidiary trunk line on the west coast as also a complex network of transverse and feeder lines. The total length of the Japanese railways in 1932 was 22,208 kilometres. Of this, 7,194 km. belonged to private enterprises and 15,014 km. to the State. This worked out to about 5.8 km. per 100 square miles of area and 3.33 km. per 10,000 of population. To end the difficulties arising out of lack of centralization due to numerous private operators, the State repurchased the greater part of the railways in 1905.

At the end of 1951 there were 27,670 km. track, of which 7,524 km. or nearly 27 per cent, were electrified. The total was divided between Governmental and private ownership in the ratio of approximately 3 to 1. The private railways are of local importance and are governed by the law on local railways. They receive State subsidies for these services. The private railways are mostly feeder lines, often little more than tram services, and largely electrified.

The Railway Department is responsible for the administration of the State railways, which are divided into the following six districts for the purposes of administration : Tokyo, Nagoya, Kobe, Moji, Sendai and Sapporo. The law establishes the rights and obligations of the railways, while the management fixes tariffs and settles all questions relating to time-tables, speed, safety, and comfort. The State Railway Authorities supervise the operations of the private companies which have to submit their tariffs and regulations for approval to the former.

By the Imperial Railway Special Account Law of 1909 the railways were given financial autonomy and since then the railway budget has been separated from the general finances. According to this Law, capital expenditure for the construction and development of the railways must be met out of the revenue accruing from the traffic on the railways, and in the event of loss, such expenditure must be covered by public loans issued under a special account.

### RECENT POSITION OF JAPANESE RAILWAYS[1]

The monthly totals carried by all Japanese railways in December 1951, reached 15 million tons of freight and 680 million passengers, a formidable achievement but still not yet up to the level of 1943. The railway system was damaged by bombing during the war, but steady rehabilitation has taken place under the Occupation, which has been facilitated by the fact that Japan possesses an efficient locomotive and rolling stock industry, manufacturing for domestic needs and also exporting to South and South East Asia. In 1951 Government and private railways had the following :—

| | | *On hand* | *Serviceable* |
|---|---|---|---|
| Steam locomotives | ... | 5,652 | 4,894 |
| Electric locomotives | ... | 574 | 525 |
| Passenger cars | ... | 12,559 | 1,05,397 |
| Electric cars | ... | 11,980 | 11,346 |

---

[1] Japan, Overseas Economic Survey, H. M. S. O., London.

The Japanese railway system does not require large scale extension. Further branch lines continue to be added and electrification is being generally extended, but progress in this is dependent on the execution of the Government Plan for the development of hydro-electric generation.

## ROADS AND MOTOR TRANSPORT IN JAPAN

The road system of Japan is considered to be deplorable by Western standards, although the Japanese trucks are able to negotiate them. In this sense, therefore, it may be said that the Japanese roads connect every village in that country. Most of the roads are far below the Western standard in regard to straightness, width and surface. Nevertheless, the system carries a very large volume of freight and passengers in relation to the number of vehicles in the country.

Upto 1931 motor transport in Japan was governed by the Motor Vehicle Central Act of 1919. This Act dealt mainly with private motor cars and hence was found inadequate to meet the conditions of modern traffic. A new Act was passed in 1931 to regulate motor transport. It distinguishes between commercial transport of persons on the one hand and transport used mainly for private purposes, *viz.*, taxis, private hire cars, hotel cars, etc. The Act places commercial transport services under the control of the Railway Department, to which any application for sanction to open a new service has to be made. The application has to state the tariffs, number, dimensions of vehicles, and other details of operation, all of which are required to be approved by the Railway Department. The Act has given the Minister of Railways extensive powers in respect of the alteration of tariffs, improvement of roads for the exclusive use of motor cars, extension of roads, introduction of joint road and rail services, amalgamation and merger of companies competing over the same route, and the insurance of passengers and goods.

In Japan the rail road competition is very limited. Motor transport is regarded as an auxiliary of the railways. The Railways Authorities see to it that the two means of transport do not compete too keenly with each other and that the motor bus transport is the real collaborator of the railways. However, in the transport of goods, the motor bus has distinct advantages in its favour and in this field, therefore, the railways do feel the effects of motor transport competition.

### PRESENT POSITION OF MOTOR TRANSPORT[1]

At the end of 1951 the number of registered vehicles in Japan was 4,99,000 as compared to only 1,00,100 in 1932. According to the Japanese Ministry of Transportation, highway transport carried 29 million tons of freight and 145 million passengers in December 1951. These figures, in relation to railway transport, do not show the difference in distances covered between the two. Of vehicles registered, 3,40,000 were buses and trucks (half of the latter being small three wheelers, and 72,000 were passenger cars and taxis, the remainder being special purpose vehicles, motor cycles and that post-war phenomenon, the motor scooter, which on Japanese roads gives the most comfortable ride in the world. The Ministry of Construction figures are :

| | |
|---|---|
| National highways ... | ... 9,300 km. |
| Prefectural roads ... | ... 122,623 km. |
| City streets ... | ... 85,312 km. |
| Town and village roads | ... 654,427 km. |
| Total | ... 871,662 km. |

The Japanese press from time to time advocates an "*auto-bahn*" system connecting the main cities of Honshu, to modernise the national highways and to attract tourists, but budgetary considerations have so far prevented this.

---

[1] Japan, Overseas Economic Survey, H. M. S. O., London.

## SHIPPING AND SHIPBUILDING IN JAPAN

Modern Japan was compelled to be a shipowning nation from the beginning of her career. And despite lack of iron and coal, military expediency forced her also to build ships. J. E. Sangstad in his 'Shipping and Shipbuilding Subsidies' notes the following factors for the remarkable expansion of Japanese shipping.

(*i*) the teeming population of Japan proper (60 million in 1932) confined to a relatively small and unproductive area of 148,000 square miles or nearly 400 to the square mile,
(*ii*) the necessity for importing part of the food requirements,
(*iii*) the necessity for exports to balance imports,
(*iv*) the lack of native minerals and the consequent necessity for importing raw materials for its expanding industries, and
(*v*) the low wages.

Sir Osborne Mance attributes Japanese success in shipping to the following factors :—

(*i*) efficient labour at low wages,
(*ii*) rationalized production and able management (attracted by the importance of the industry) under State encouragement or direction, which on the whole had been prudently applied,
(*iii*) a close co-operation between the Japanese shipping companies and the great merchant and financial interests,
(*iv*) the rapid growth of Japanese trade with its regular inward and outward cargoes,
(*v*) subsidies.

(*vi*) the gradual depreciation of the yen in foreign exchanges, which brought into action and increased the potential competitive advantages enjoyed by Japanese industry, and

(*vii*) Japan's geographical position in the centre of an immense area of expanding trade.

From the Restoration only the Japanese Government has paid close attention to shipping because the importance of maritime transport in war was soon realised. After the Sino-Japanese War of 1894 the Government inaugurated a bold programme of subsidies and loans to the shipbuilders and operators.

After the first World War Japanese shipping passed through a difficult period. By 1928 the Government policy of subsidies and loans took shape but the deflationary financial policy of the Government adversely affected this industry, especially the new enterprise. Recovery was, however, made after 1931 when Japan left the Gold Standard. Until 1936 the Government only brought pressure on the traders to use Japanese lines. But in 1936 the Government got wide powers in respect of shipping by an Act passed in that year. This Act empowered the Government to take effective measures to stop competition among shipping interests. The Government could order persons to come to an agreement regarding the operation of shipping services. If an agreement could not be reached the Government was empowered to restrict the operation of such services. Government intervention was allowed also in the case of the freight rates being against the public interests.

This power, in addition to the willingness of the shipowners and industrialists to sink their differences and follow the lead of the Government and the belief of the Japanese people that their country was destined to be, and had a right to be, an ever-expanding power in the world and the dominant power in the Pacific, made possible an undreamt of progress of Japanese shipping and shipbuilding. In 1932 a major portion of the Japanese mercantile marine consisted of old ships. A vigorous modernization programme was started under thé aegis of the Government. By 1937 a major portion of Japanese ships of over 4,000 gross tons comprised of ships not older than five years. She had by this time a merchant fleet with a higher proportion of new ships as compared with any other country of the world. After 1936, therfore, Japanese competition was keenly felt by other maritime countries. Thanks to the shipbuilding subsidies (which in some cases amounted to 50 per cent of the building costs !) the Japanese 'Scrap and Build' programmes resulted in the construction of high-class and high-speed ships. Between 1932 and 1937 Japan organized three subsidized 'Scrap and Build' programmes, which involved the scrapping of 119 vessels with a total tonnage 5,00,240, and the construction of 48 ships totalling 3,00,500 gross tons at a subsidy of 14 million yen.

It is estimated that between 1897 and 1906 ship-building subsidies averaged approximately 2,50,000 yen per year. It was 12,50,000 yen per year between 1906 to 1916. In 1896 the operating subsidy amounted to 1 million yen. This annual figure had risen to 11.2 million in 1914, and to 14 million yen in 1930-31.

Special banks gave loans and other credit facilities to shipowners and shipbuilders. These banks were of a semi-official type and the Government either guaranteed the loans against loss or subsidized the interest payments. The Industrial Bank for Shipbuilding was one such bank which was authorized to advance to the maximum of 5 million yen in 1930. This maximum was raised to 30 million yen in 1936-37 and to 100 million yen in 1937-38. The interest rates were as low as 3.7 per cent in 1936. The Ministry of Finance added one per cent from the State Treasury to make the total receipt to the banks of 4.7 per cent. The Government also gave direct subsidies by granting five-year contracts of carrying mail to Seattle, San Francisco and the

West Coast of South America in 1929 and 1930. It was clear that by 1938 the expansion of most of the national mercantile marine fleets, including that of Japan, had become a matter of military preparation.

In international competition Japan often indulged in practices which bordered on the illicit. Japanese success in international competition was due to a combination of factors such as enterprise, efficiency in organization, subsidies, co-operation of Japanese shipping interests among themselves, as well as with other national industries and the weakness and the short-sighted policies of her rivals. It was often complained that Japan tried to evade agreements by concealed practices, such as concealed rebates on false measurement of cargo, favourable settlement of claims with the object of retaining custom, etc., etc.

A notable feature of Japanese shipping development has been the close co-ordination and co-operation, under Government direction, of shipping, shipbuilding, cargo-producing industries and banking. This feature has given Japanese shipping, as well as other industries, a tremendous advantage in international competition. Sir George Sansom, Commercial Counsellor to the British Embassy at Tokyo, in his report of October 1937, has given an interesting example of the degree to which co-ordination has been developed in this respect in one of the three or four powerful groups in Japan. The Mitsubishi interests predominate in the Nippon Yusen Kaisha, which is a shipping company. The following are independent profit-making companies in the Mitsubishi group.

1. The Mitsubishi Trading Company. Importers, exporters, manufacturers and brokers.
2. The Mitsubishi Bank. General Banking and exchange.
3. The Mitsubishi Marine and Fire Insurance Company. Insurance.

4. The Kyushu Colliery and Steamship Company.
   Coal mining and shipping.
5. The Mitsubishi Heavy Industries Company.
   Shipbuilding, engine and boiler making.
6. The Mitsubishi Mining Company.
   Coal and metal mines.
7. The Mitsubishi Oil Company.
   Petroleum refiners.
8. The Mitsubishi Warehouse Company.
   Stevedores, wharfingers and warehousemen.

"Thus the Nippon Yusen Kaisha had at its disposal", writes Sir Osborne Mance, "the services and goods of an immense industrial and mercantile organization.........it was obvious that the Nippon Yusen Kaisha must benefit by its close liason with other members of the group. It could rely on carrying a considerable proportion of the goods exported or imported by the trading company, and it could be sure at least of favourable, if not of preferential, treatment in its dealings with the shipyards, the insurers and the stevedores."

Japan had made systematic attempts at penetration into the Far East. Japan tried to penetrate into the East Indies by conceding timber and other concessions. Taking advantage of the fact that inter-island coasting trade in the East Indies was not reserved to the Dutch ships, Japan entered that trade and started under-cutting rates. The Dutch were forced to take discriminatory measures against Japanese shipping. In a freight war which was started by Japan, the results were favourable to the Dutch. In 1936, therefore, an agreement was reached to share the Java-Japan traffic between the Dutch and Japanese lines.

The coasting trade in Japanese waters and between Japan and her dependencies was reserved for the national flag. There was scope for making exceptions but foreign shipping generally did not engage in this trade. In 1937, however, foreign shipping was permitted to enter this field because of military exigency and the consequent congestion of cargo in the docks. For the same reason of military requirements Japan removed the embargo on importation of second-hand foreign ships; cancelled foreign orders for ships under construction in Japanese yards; put a general embargo on the disposal of ships to foreigners; imposed rigid control on such matters as the prohibition of transport between foreign ports, the designation of journeys and of cargo or persons to be carried, the control of freight and charter rates, building prices and sale prices of ships, priorities in all matters concerning shipbuilding; and required reports from shipping and shipbuilding firms, etc.

JAPANESE SHIPBUILDING PRODUCTION
(Vessels of over 100 tons gross)

| *Year* | *Output in gross tons* |
|---|---|
| 1900 | 12,000 |
| 1910 | 24,000 |
| 1920 | 4,48,000 |
| 1925 | 56,000 |
| 1930 | 1,54,000 |
| 1935 | 1,42,000 |
| 1940 | 3,07,000 |
| 1944[1] | 17,30,000 |
| 1945 (15-8-45—31-3-46) | 81,000 |
| 1946 | 10,000 |
| 1947 | 1,12,000 |
| 1948 | 1,69,000 |
| 1950 | 3,68,000 |
| 1951 | 4,72,000 |
| 1952 | 5,41,000 |
| 1953 | 6,26,000 |

---

[1] The extraordinarily large production was due to mass shipbuilding of standard war-time ships. Hence the figure does not represent the normal capacity of the yards.

Source : Japan ,A Commerce Survey, Commerce 28-8-54.

### PROGRESS OF JAPANESE MERCHANT FLEET

(Vessels of 100 tons gross and over)

| *Year* | *No.* | *Gross tons* |
|---|---|---|
| 1903 | 544 | 5,85,542 |
| 1904 | 591 | 6,68,360 |
| 1905 | 691 | 8,70,839 |
| 1906 | 725 | 9,96,553 |
| 1907 | 829 | 10,68,747 |
| 1908 | 865 | 11,40,177 |
| 1909 | 861 | 11,50,858 |
| 1910 | 846 | 11,46,977 |
| 1911 | 861 | 12,00,975 |
| 1912 | 960 | 13,44,991 |
| 1913 | 1,037 | 15,00,041 |
| 1914 | 1,103 | 17,08,386 |
| 1915 | 1,155 | 18,26,068 |
| 1916 | 1,151 | 18,47,453 |
| 1919 | 1,418 | 23,25,266 |
| 1920 | 1,940 | 29,95,878 |
| 1921 | 2,033 | 33,54,806 |
| 1922 | 2,026 | 35,86,918 |
| 1923 | 2,003 | 36,04,147 |
| 1924 | 2,055 | 38,42,707 |
| 1925 | 2,087 | 39,19,807 |
| 1926 | 2,087 | 39,67,617 |
| 1927 | 2,035 | 40,33,304 |
| 1928 | 2,048 | 41,39,815 |
| 1929 | 2,059 | 41,86,652 |
| 1930 | 2,060 | 43,16,804 |
| 1931 | 1,969 | 42,76,341 |
| 1932 | 1,964 | 42,55,014 |
| 1933 | 2,019 | 42,58,159 |
| 1934 | 1,949 | 40,72,707 |
| 1935 | 2,146 | 40,85,650 |
| 1936 | 2,367 | 42,15,690 |

| *Year* | *No.* | *Gross tons* |
|---|---|---|
| 1937 | 2,564 | 44,75,110 |
| 1938 | 2,187 | 50,06,712 |
| 1939 | 2,337 | 56,29,845 |
| 1948 | 1,204 | 10,23,560 |
| 1949 | 1,121 | 15,63,936 |
| 1950 | 1,499 | 18,71,276 |
| 1951 | 1,529 | 21,82,352 |
| 1952 | 1,587 | 27,87,163 |
| 1953 | 1,669 | 32,50,412 |

Source: Lloyd's Register of Shipping.
Our Source: Japan, A Commerce Survey, Commerce, 28-8-54.

## JAPANESE SHIPPING AND SHIPBUILDING TODAY

The second World War left Japan with hardly 7,50,000 gross registered tons of shipping compared to 5.6 million tons in 1939. By 1953 she had nearly three and a quarter million tons of shipping, ranking the eighth shipowning and second ship-building country in the world. The recovery has been rapid especially since 1952 when the Peace Treaty was signed and a number of restrictions on shipbuilding and fleet expansion were removed.

The shipyards were not very much damaged during the war but they could not be used because the whole economic machinery of Japan had collapsed. However, the Japanese Government took prompt action and in the last two years Japanese competition is being keenly felt by other maritime nations, especially due to a sharp shrinkage in the volume of world trade. Japan has ambitious plans of fleet expansion and she is expected to attain a fleet of 4 million g.r.t. by 1959 after replacement of all the older and uneconomic vessels. The Government itself has sponsored these programmes under which all the shipyards are kept busy.

Shipping is very vital today to Japanese existence for the simple fact that it is a good earner of foreign currency.

In fact, its foreign currency earnings stand next only to the receipts from the Allied forces in Japan. The factors which make her national existence dependent on shipping are the same today as were mentioned in the beginning of this section. With the acute necessity of importing food, raw materials and essential supplies from abroad, and left without any foreign assets, the deficit of Japan on merchandise trade balance runs into about $ 1,000 million per year. In 1953 shipping services earned for Japan some $189 million. It is expected to raise this income to $300 million by 1959.

The restrictions which prevented Japanese ships from resuming all their pre-war shipping routes came to an end when the Peace Treaty was ratified. Already over the previous two years the G.H.Q. has obtained blanket clearance for Japanese ships to enter the ports of the great majority of countries most involved for her international trade, practically the only exception being United Kingdom and Colonial ports, entry to which by Japanese ships had been granted up to 28th April 1952, by individual clearances. Meanwhile Japanese lines are being steadily admitted to all the Shipping Conferences to which they belonged before the war. The Japanese Maritime Transportation Law as amended in1951 permits the activities of Shipping Conferences in Japan, but with a number of safeguards against unfair practices, and a prohibition on deferred rebates. This Law also abolishes all subsidies to shipping operation except in respect of a few essential coastal services. The avowed aim of the Japanese Ministry of Transportation is to obtain, as quickly as possible, a Japanese merchant fleet capable of carrying 50 per cent of the total imports and exports of the country, and to do this a tonnage of 4 million gross tons has been estimated as the target to be reached by 1955.[1]

At present nearly 50 per cent of Japanese tonnage is engaged in regular liner trade, about 15 per cent of the tonnage in the regular liner trade being employed on the Japan-India/Pakistan trade. Approximately one-third of the total dry cargo tonnage is engaged in tramp services. Of the total 811 dry cargo ships, nearly 150 ships with a tonnage of 12,40,000 d.w. were engaged in tramp trade in 1953. The tramp tonnage consists mainly of 10,000 tonners of wartime standard type and 8,000 tonners purchased from abroad during the Korean boom.

---

[1] Japan, Overseas Economic Survey, H. M. S. O., London.

The wartime damage to the shipbuilding yards was estimated at about 30 per cent. The overall capacity of Japanese shipyards after the war stood at 800,000 gross tons, as compared to 15,00,000 tons during the war and between 4,00,000 and 5,00,000 tons in the pre-war years. At present there are 70 active shipyards in Japan employing about 1,00,000 workers and capable of constructing and repairing ships of 500 gross tons and over.

The Japanese yards build for home as well as foreign shipowners. But owing to high prices of steel, the Japanese shipyards have to quote high prices. In shipbuilding, therefore, the U.K. has a great advantage over Japan. Quick delivery is, however, an attraction for foreigners to place their orders with Japanese shipyards. Their shipyards have been able to give quick delivery, in many cases within a year of the order being placed, and Japan has been able to obtain many orders for export to foreign owners.

Government financial assistance to Japanese shipbuilding since the war first took the form of (*a*) loans for the provision of capital funds for the building of ships; (*b*) subsidies for materials used in building ships and (*c*) loans for re-equipment of the ship-building industry. With the cutting down and eventual abolition of import, export and domestic subsidies after April 1949, a new phase of Governmental financing started with the fifth post-war shipbuilding programme announced in September, 1949, and has since continued, by the use of loans from the Yen Counterpart Fund, created by the sale of materials and foodstuffs supplied to Japan under United States G.A.R.I.O.A. aid. Such Counterpart Fund loans have been limited to 50 per cent of the cost of each shipbuilding programme, and have been furnished on broadly commercial terms at 7½ per cent interest per annum, which rate, however, is still well below the rate prevailing from the commercial banks. Although aiming at an annual domestic shipbuilding programme of 4,00,000 gross tons, actual construction since 1949 has fallen short of this figure, usually because of lack of yen finance, and for 1952 the programme stood at 3,00,000 tons.[1]

PRINCIPAL SHIPYARDS OF JAPAN[2]

| Shipyard | Capacity (*gross tonnage*) |
|---|---|
| Hokodate Dock | 8,000 |
| Ishikawajima H.I. | 30,000 |
| Nihon Kokan, Tsurumi | 40,000 |
| East Japan H. I., Yokohama | 40,000 |
| Uraga Dock | 28,000 |
| Nihon Kokan, Shimizu | 6,000 |
| Nagoya Zosen | 15,000 |
| Hitachi Zosen, Sakurajima | 20,000 |
| Fujinagata Zosen | 15,000 |
| Namura Zosen | 5,000 |
| Sanoyasu Dock | 6,000 |
| Kawasaki H.I. | 80,000 |
| Central Japan H.I., Kobe | 30,000 |
| Harima Zosen | 50,000 |
| Mitsui Zosen | 60,000 |
| Hitachi Zosen, Innoshima | 25,000 |
| Hitachi Zosen, Mukaishima | 10,000 |
| West Japan H.I., Hiroshima | 30,000 |
| West Japan H.I., Nagasaki | 80,000 |
| Total | 5,78,000 |

---

[1] Japan, Overseas Economic Survey, H. M. S. O.

[2] Source: Japan, Overseas Economic Survey, H. M. S. O., London.

### PRINCIPAL JAPANESE SHIPPING LINES

| Name of Shipping Firms | No. of ships | Gross tonnage |
|---|---|---|
| Nippon Yusen Kaisha ... | 16 | 1,12,637 |
| Jino Kaiun ... ... | 13 | 1,01,023 |
| Osaka Shosen Kaisha ... | 15 | 99,062 |
| Mitsui Steamship ... | 17 | 90,638 |
| Yamashita Steamship ... | 10 | 59,705 |
| Shin Nihon Marine ... | 9 | 52,378 |
| Nissan Steamship ... | 9 | 50,313 |
| Kyoritsu Kisen ... ... | 7 | 49,515 |
| Daido Kaiun ... ... | 8 | 49,109 |
| Mitsubishi Shipping ... | 7 | 44,780 |
| Kawasaki Steamship ... | 8 | 43,595 |
| Nitto Merchant Ship ... | 8 | 40,239 |
| Toho Navigation ... | 6 | 40,109 |
| Tokyo Shipping ... ... | 5 | 31,198 |
| Nippon Shipping ... | 6 | 30,226 |

Source: Japan, Overseas Economic Survey, H. M. S. O., London.

## CIVIL AVIATION IN JAPAN

Japanese air wings had not spread beyond Japan and her colonies up to 1932, after which year, however, Japanese air transport followed the Army in the penetration of Manchuria and China. By 1942 Japanese lines served the Pacific islands under her mandate. In 1940 a service to Bangkok was established. In 1941 a service was started linking Japan and Portuguese Timor, off Australia. As the Japanese Empire marched southward with the progress of war, Japan had ambitious plans for air penetration into the Philippines, the Dutch East Indies, Australia and eventually Europe and North America. With her early victories Japan did succeed in some of her plans.

Up to 1934 the air transport system of Japan was in private hands. In 1928 Japan's largest air transport enterprise, *viz.*, the Japan Air Transport Company (Nihon Koku Yuso Kabushiki Kaisha) was started with the participation of great industrial houses like that of Mitsui, Mitsubishi, Sumitomo, Okura, etc. Besides this company there were a few small air transport enterprises.

Following the recommendations of the Railway Department the Government embarked in the thirties on an ambitious plan of operating by the Railway Department a gigantic aerial line. The Railway Department was of the opinion that air transport should not be wholly left to private enterprise, if it had to be developed along the most up-to-date lines. This again was not advisable from the point of view of meeting any national emergency. These air lines were to run between Japan and Karafuto, Taiwan, Chosen and Manchukuo. This plan, however, failed; and a less radical plan was, therefore, evolved for statization. In December 1938 the formation of a new enterprise called the Japan Airways Company (Dai Nippon Koku Kabushiki Kaisha) with a capital of 25.5 million yen was authorised. In 1939 the Japan Airways Company Law was passed by which the above company was nationalized. Its authorised capital was raised to 100 million yen of which the Government investment was to be 37.25 million yen. However, all the officers and directors of the Company were to be nominated by the Government, whose prior sanction was required for any policies of the Company. The Company was actually started on 1st August, 1939. In the beginning itself it absorbed two other companies, and in course of time it took over all other regular air transport concerns in the country.

In Manchukuo the Manchuria Aviation Company had been operating since 1932. This was owned jointly by the Government, the South Manchuria Railway (which itself was owned by the Government to the extent of 50 per cent), and the Sumitomo concern.

When the Japan Airways Company was started, Japan was spreading its tentacles southward. Aviation had also to share the Empire's southward march by establishing long and unprofitable air routes to the South Seas, Central and South China, Thailand, etc. Such lines to Saipan, Palau, Formosa, etc., possessed mainly strategic, administrative and prestige values. Japan desired by opening these routes to link them with the American trans-Pacific service. This link would have given Japan a double advantage of strategy and an increase in the commercial value of her Pacific lines.

Civil Aviation in Japan is dependent on heavy Government subsidies. The Dai Nippon Koku K.K.had an annual budget of 10 million yen in 1939. The Japan Airways Company Law, 1939 gives a guarantee of 6 per cent dividends on the privately held shares of the Company, and of the principal and interest on debentures up to double the amount of paid-up capital. Up to 1935 the Government subsidies were falling. They began to rise steeply in 1936-37 when Japanese air services were extended to China, the South Seas and Thailand. The direct subsidies increased still further from 1939 when the Dai Nippon Koku K.K. was started. It is estimated that the direct subsidy must have amounted in 1939 to at least 60 per cent of the total budget of the Dai Nippon Koku K.K. In Japan while the Government maintains the airways, the construction and operations of airports is largely the responsibility of the cities and prefectures.

### PRESENT POSITION OF CIVIL AVIATION[1]

Under the Occupation, Japan was prohibited from manufacturing or operating aircraft, but the Peace Treaty contains no restrictions on aviation. Even before its ratification in April 1952, the Japan Air Lines Company had been established, this being a domestic company which initially purchased a number of American passenger aircraft and had them operated under contract by the American company,

---

[1] Japan, Overseas Economic Survey, H. M. S. O., London.

North West Airlines, on a service connecting Sopporo-Tokyo-Osaka-Fukuoka. Civil Aviation is now opening up with a rush, and there are plans for domestic trunk and feeder lines, and transcontinental lines. Japanese technical knowledge of piston-engined aircraft reached a stage of excellence before and during the war and their construction capacity was outstanding for an Asiatic nation; this factory capacity has not been dismantled for reparations under the Occupation although some of the machine tools have been removed. The Japanese have had little opportunity to keep up with the development of the jet engine. From now on, however, a rapid revival of the Japanese aviation industry is bound to take place, with or without technical assistance from foreign aircraft producers. As regards foreign airlines, all the major companies run services to Tokyo, which is consequently well connected with the outside world. At present these services consist of :

| | | | | | |
|---|---|---|---|---|---|
| B.O.A.C. | 3 | services | weekly | with | Europe |
| Canadian Pacific | ...1 | service | ,, | ,, | Canada |
| Cathay Pacific | ...1 | ,, | ,, | ,, | Singapore |
| Civil Air Transport | ...1 | ,, | ,, | ,, | Hong Kong |
| K.L.M. | ...1 | ,, | ,, | ,, | Europe |
| North-West Airlines | ...3 | services | ,, | ,, | U.S.A. |
| Pan-American | 4 | ,, | ,, | ,, | U.S.A. |
| Philippines Air lines | ...1 | service | ,, | ,, | Europe |
| Qantas | ...2 | services | ,, | ,, | Australia |
| Swedish Airlines | ...2 | ,, | ,, | ,, | Europe |
| Thai Airlines | ...1 | service | ,, | ,, | Bangkok |
| Air India International | 1 | ,, | ,, | ,, | India. |

# TRANSPORT IN INDIA

## ROADS IN INDIA

Roads keep people and goods on the move and thus contribute towards national prosperity. They are the arteries of a civilised community. Busy as we are with material and moral reconstruction of our country, we need hardly emphasize the national importance of good and adequate roads. "If the manifold resources and teeming man-power of our country are to be utilised for the benefit of the common man," says Dr. John Mathai, "they must be harnessed to the chariot of production and move along the lines of communications, particularly, road communications". The solution of our food problem and, in fact, the whole problem of rural reconstruction on sound lines is linked up with road development. They can also bring about a cultural revolution by opening the vistas of knowledge to our ignorant villagers. It need hardly be pointed out that roads have a vital role to play in the defence of the country. Roads, in any country are the index of economic and cultural progress. They are the symbol of motion; if there is any motion in any society, the roads will indicate it.

India has approximately 2,40,000 miles of roads in an area of 12,10,000 square miles. Thus, we have 0.20 mile of road per sq. mile, whereas the U.K. has 2.02 and the U.S.A. 1.01 miles per sq. mile. This clearly means that we have inadequate roads. Again, our road system is unbalanced, that is to say, the trunk roads are more developed than the district and village roads. A large number of villages are not connected with any urban centre or a railway station on account of inadequacy of roads. Many really fertile tracts of land have remained undeveloped for the same reasons. The village roads are fair-weather tracks. The backwardness of Indian agriculture and the cultivator can be largely attributed to the lack of good roads. It is obvious, therefore, that we want more roads and also more bridges, without which roads are severed by unfordable rivers or even by streams.

Excluding municipal roads in large cities and towns, we have a total road mileage of 2,40,000. Of these, nearly one-third are surfaced. Our roads are classified as *(i)* National Highways, *(ii)* Provincial Highways, *(iii)* District Roads and *(iv)* Village Roads.

Since 1919, the Provincial Governments have been responsible for the construction and maintenance of roads. The Central Government made block grants to the provinces from the Central Road Fund. These grants being inadequate, road development could not progress far. From 1-4-1947, the Central Government assumed larger financial responsibility for the maintenance and construction of roads accepted by the Central Government as National Highways. Under the present Constitution, National Highways have been included in the Federal List. The Provincial Highways are the responsibility of the State Governments. The District and Village Roads, being the responsibility of the local bodies, with their meagre financial resources, have remained neglected. It is being realised that maintenance and construction of roads of a better type is too heavy a task for which the local bodies are ill-equipped, and hence many State Governments have been contemplating the transfer of control over the district and village roads to the State P. W. Departments.

While the interest of the Central Government in the roads ceased after 1919, the Provincial Governments confined their attention to only a strictly limited mileage, leaving the district and village roads to be neglected by the local bodies. At this time, the transport revolution was taking place in India. After the World War surplus military vehicles became available for civilian use. Buses were fast becoming very popular and were replacing rapidly the bullock-cart. The roads wore out fast and the local bodies could not cope up with the task of maintaining them. This resulted in the setting up of a Committee to investigate and report.

## THE JAYAKAR COMMITTEE, 1927

The Committee was presided over by Dr. M. R. Jayakar. It reported in 1928. The Committee said that roads were a matter of national importance and thus it might be a proper charge on the Central revenues. It recommended that the Centre should assist in the co-ordinated road development by making annual block grants to the provinces from out of a Central Road Fund built up by a petrol tax surcharge of two annas per gallon.

## THE CENTRAL ROAD FUND

The Central Road Fund came into existence in March, 1929 and though initially it was instituted for only five years, it became permanent. The Jayaker Committee recommended that the Fund should be administered by the Central Government with the advice of a committee of the Central Legislature. One-sixth of the Fund was to be reserved for Central administration, intelligence and grants for special undertakings. The rest of it was to be allocated to the provinces on the basis of their petrol consumption.

During the depression in the 'thirties' the moneys of the Fund were diverted even to the maintenance of roads and other purposes. However, considerable improvements were made possible on account of the existence of the Fund. By 1939, 382 new bridges or causeways were built at a cost of Rs. 253 lakhs. As sum of Rs. 42 lakhs was spent on repairs and improvements of bridges and culverts. About 1230 miles of concrete and other modern surfaces and 1,500 miles of fair weather roads were also built, and 2,200 miles of existing metalled roads were improved. A sum of Rs. 22 lakhs was spent on miscellaneous improvements.

## THE INDIAN ROADS CONGRESS

In 1934, a semi-official body known as the Indian Roads Congress was promoted. Its membership is open to qualified road engineers. Others interested in the road development may also join this organisation. The Congress is designed to effect the pooling of professional knowledge and experience. It has more than a thousand members. It holds its sessions at regular intervals and has been doing a lot of useful work, through its various committees, who go into such questions as bridge specifications, research and experiments, test track and soil research.

When the war broke out in 1939, the position regarding road administration was found to be unsatisfactory, especially when the Japanese offensive became imminent. The situation called for intensive efforts to develop strategic roads all over the country. As the financial aspect presented obvious difficulties, the development of roads of military importance was put under the Defence Estimates. There was a radical change of outlook towards the question of roads and the responsibility for providing an arterial system.

## THE NAGPUR PLAN

At the instance of the Indian Roads Congress, the Government of India convened a Conference of Chief Engineers at Nagpur in December 1943. Their deliberations resulted in a ten-year plan for road development and their report has come to be known as the Nagpur Report.

The Report classifies roads as follows :—

1. National Highways are those which connect capitals of provinces and states, ports and foreign highways. They

are the main arteries of communication. The national highways also include roads of strategic importance.

2. Provincial or State highways are the main trunk roads of a province or a state.

3. Major District roads connect areas of production and markets with either a railway or a highway. They also serve as links with the neighbouring districts.

4. Minor District roads and Village roads.

The Plan envisaged the road requirements of the country for about 20 years after the conclusion of the second World War. The objective aimed at is a balanced development of roads in such a manner that every village in a well developed agricultural area is connected with a main road.

THE TOTAL MILEAGE AND THE COST OF THE PLAN

| | | Length (*Miles*) | Cost (*In crores of rupees*) |
|---|---|---|---|
| National Highways | ... | 22,000 | 47 |
| National Trails | ... | 3,000 | 3 |
| Provincial Highways | ... | 65,000 | 121 |
| District Roads-Major | ... | 60,000 | 62 |
| ,, ,, Others | ... | 1,00,000 | 80 |
| Village Roads | ... | 1,50,000 | 30 |
| Arrears of war years | ... | ... | 10 |
| Bridging | ... | ... | 45 |
| Land Acquisition | ... | ... | 50 |
| | | 4,00,000 | 448 or 450 |

The Nagpur Report places the financial responsibility of fresh development and annual maintenance of the National Highways on the Central Government. These are to be administered by a Road Board. It shall also devolve on the Central Government to assist in the co-ordination of road development planning, road research, Central standards specifications and technical know-how covering all aspects of road construction and maintenance. The Central Government should also train engineers and advise on legal problems arising out of land acquisition, etc.

The Government of India have already implemented several recommendations of the Nagpur Report and with effect from the 1st April 1947, the Government have assumed complete financial liability for the construction and maintenance of the National Highways. Fiscal conditions later necessitated the scaling down of the National Highways and Trails from about 25,000 to about 18,000 miles for undivided India. For post-partition India, the mileage completed for National Highways is about 14,000. About 500 important bridges are also to be constructed, 22 of which will be more than 3000 feet in length. In the case of new development works, bridging of unbridged streams will be given the highest priority.

## THE CENTRAL ROADS ORGANISATION

The planning and execution of the National Highways scheme is done by the Central Roads Organisation, under the Consulting Engineer to the Government of India. It has an expert staff of Planning Officers, Engineer Consultants, experts in bridges, standardisation, road machinery, etc. The Organisation assists the State P.W.D.s and advises the Central Government in the planning of National Highways alignments and siting and designing of major bridges. It prepares the annual working programmes and keeps the long term targets continuously in view. It also tackles other problems concerning road development like road research, road statistics, bulk procurement of machinery and overseas training of road engineers, etc.

## ROAD DEVELOPMENT AND THE FIRST FIVE YEAR PLAN

The Five Year Plan for the development of national highways provides for the completion of the works in hand

and for the construction of 450 miles of new roads and 43 very large bridges as well as a large number of small bridges. In addition, about 2,200 miles of roads will be improved.

A sum of Rs. 27 crores over a period of five years has been provided for in the Central Government's plan for the development of national highways. A separate provision of Rs. 4 crores has also been made for the development of certain selected roads (other than national highways) for which the centre will provide the finance. Further, a sum of Rs. 21.15 lakhs will be spent on the Central Road Research Institute. The total provision for road development in the plans of the States is Rs. 73.54 crores out of which Part 'A' States account for Rs. 50.59 crores, and Part 'B' States for Rs. 16.68 crores, the balance being for Part 'C' States.

## Progress Of Road Development Since The Plan

Out of the sum of Rs. 27 crores set apart in the Central Government's plan for national highways, Rs. 8.15 crores were provided in the budgets for 1951-52 and 1952-53. About Rs. 7.4 crores of this budget provision was expended. As regards actual physical targets, the construction of 925 miles of new roads was planned to be undertaken during the period of the Plan of which 640 miles were scheduled to be completed. At the end of the first two years 240 miles of this new construction had been completed and work was in progress on 450 miles. Similarly, 3,000 miles of existing roads were to be taken in hand for improvement during the five years, of which 2,500 miles were scheduled to be completed. By the end of the first two years, improvement of 1,050 miles had been completed and work was in progress on improvements over a further 1,500 miles.

As regards bridges, 68 large new bridges were planned to be taken in hand during the five year period, 40 of which were to be completed. So far 17 bridges have been completed and work on 20 bridges is in progress.

The Centre had accepted the financial liability for certain selected roads other than national highways. Amongst these are the border road to connect Tripura and Assam, the Pathankot-Jammu Road, portions of the west coast road in Madras and Bombay States and some roads in Sikkim. The Planning Commission admits that the progress here has not been so good in the border areas, due mainly to the difficulty of obtaining labour. By the end of 1952, about Rs. 116.87 lakhs had been expended on these roads. One hundred and forty miles of new construction had been completed and work was in progress on 120 miles and on two major bridges.

With regard to State Highways, District Roads and Village Roads which are the primary responsibility of the State Governments, the information so far available indicates that new construction and improvements (including village roads) were of the order of about 3,300 miles in 1951-52 and about 3,900 miles in 1952-53.

# MOTOR TRANSPORT IN INDIA

We now propose to deal with motor transport in India with special reference to the experiment of nationalisation. Since 1949, several States in India have partly or wholly nationalised road transport in their areas. The tentacles of nationalisation in this sphere are spreading fast and wide. The following States have introduced road transport nationalisation in their respective areas :—

*Part 'A' States*

Bombay, Bihar, Madhya Pradesh, Madras, Orissa, the Punjab, Uttar Pradesh, West Bengal.

*Part 'B' States*

Hyderabad, Jammu and Kashmir, Madhya Bharat, Mysore, P.E.P.S.U., Rajasthan, Saurashtra, Travancore-Cochin.

*Part 'C' States*

Ajmer, Bilaspur, Delhi, Himachal Pradesh, Kutch, Manipur.

We shall, however, be concerned with the State Transport in Bombay State, which can be considered as the model scheme of road transport nationalisation in the country.

We have already referred to the rapid growth of motor transport in India at the end of the first World War. The motor transport industry received an unprecedented fillip mainly due to the accummulation of war profits and the availability of motor vehicles from the disposals, both of which made this business much more lucrative. The condition of the roads was being improved and the business seemed to prosper. The ease of communications stimulated commerce and the villagers came to rely more and more on motor transport, with the result that the motor transport industry soon penetrated deep into the rural life and became a part of it.

The situation was fraught with possibilities of exploitation. The operators running buses as business tried to extract as much profit as possible. When public interest assumed a position ancillary to motives of private profits, the Government had to step in to safeguard the public against possible exploitation. The Government tried hard with legislative measures to compel the private operators to look to the needs of the travelling public. The Motor Vehicles Act of 1939 was perhaps the first step in this direction.

The problems, however, grew more complex defying any simple solution by statutory regulation. The pioneers in the motor transport industry were small traders and they soon found themselves face to face with more astute businessmen with larger funds. As there was no definite policy followed by the Government in the matter of granting permits, these motor companies competed with each other for routes. As a measure of halting cut-throat competition the Government encouraged the smaller operators to form their unions. This was also expected to put them in a better financial position.

Fortunately, however, the Government were not slow to realise that it was not so much the shortage of finance that prevented the operators from being solicitous of the public needs but it was the lack of will on the part of the road transport industry to care for the travelling public. Yet another attempt was made by the Government to improve matters but the attempt was given up before actually anything was done in that respect. A scheme was worked out with a view

1. to convert motor transport, which had by that time become a potential competing agency, into a useful adjunct to the railways;
2. to avoid duplication and wastefulness of transport by proper rationalisation and

3, to unify as far as possible all the transport operating units in a given area. The idea was to form a number of tripartite zonal companies in which the State (Bombay) and the Central Government were to have a predominant financial interest. The private operators were to own 25 per cent of the share capital and the Managing Director was to be nominated by the constituent operators. Before the scheme was brought into effect the popular Government was elected to power. They saw the shortcomings of the scheme and scrapped it altogether.

Under the prevailing circumstances, nationalisation of road transport appeared to be the only solution. It was thought that nationalisation will, above anything else, stop exploitation and achieve all that the Government wanted to get done from the private owners of motor bus transport. The Government of Bombay, therefore, decided to nationalise motor transport in the State.

Nationalisation of road transport was included as an item in the post-war reconstruction programme of the Government of Bombay. A note published in this regard ran as follows :—

In this Province, road transport has hitherto been looked upon as a vested private interest. In such a system the element of "Public Service" took very much a second place to consideration of private profit. This resulted in numerous complaints of overcrowding, irregular and inadequate services overloading and discourteous behaviour on the part of the staff. Hence Government proposes to nationalise transport and to offer the Railways if they choose to participate, financial as well as an administrative interest. The underlying aim of the scheme is :—

(*a*) to increase the operational efficiency of road transport services, (*b*) to ensure that road transport services are run on public interest and that any profits accruing from the operation of such services are utilised for the public benefit. It is proposed to entrust the nationalised road services either to a Government Department or to a statutory body functioning within the prescribed limits relatively independent of Government and legislature, yet subject to constant Government supervision.

The declared objectives of the Government were :—

1. To provide adequate and efficient services at reasonable rates.
2. To provide maximum comfort to the travelling public.
3. To achieve co-ordination with other media of transport in the interests of both the producers and users of transport and thus help maximise the national dividend.
4. To make the conditions of employment stable and reasonable.
5. Taken as a whole, the services provided should pay their way.
6. Whatever net margin accrues from the operation should revert to the public in the shape of better transport facilities.

A scheme was accordingly prepared early in 1947 and the policy in the main was accepted by the Cabinet in August of that year. The scheme was then examined in detail by a special Sub-Committee of the Transport Authority after which it was placed before the legislature for its approval. It was approved as one of the items of the post-war reconstruction programme of the State.

Nationalisation of road transport was not, it must be emphasized, a piece of any general policy to "socialize", but was a consummation of all the serious attempts of the Government to bring amelioration to the travelling public.

## THE SCHEME IN GENERAL

Having decided upon nationalisation the Government set out to work out a scheme for the same. A Committee was appointed which worked out a scheme, whose main features may be described as follows :—

1. The whole of Bombay State to be divided into 14 zones. These zones were more or less arbitrary units and did not conform to the Revenue Districts of the State. The zones were to be created with a view to ensure homogeneous traffic flow.
2. The estimated total expenditure was Rs. 4 crores, to be contributed by the Government of Bombay and the Union Government in the ratio of 3:1. This estimate, however, had soon to be revised to Rs. 5.33 crores.
3. The scheme was to be completed by the end of three years after it was started.

The scheme, however, has since then undergone many changes including even its general pattern. For purposes of State Transport, Bombay State now stands divided into more than 15 units called divisions and the field of operation also expanded due to the merger of the former princely states. The estimate also increased from Rs. 5.33 crores to Rs. 18 crores or so, and the scheme is expected to extend over 8 years. The Union Government's share in the undertaking also increased from 25 per cent to 33⅓ per cent. It has been mutually agreed upon between the State and the Central Governments that the dividend from the Bombay State Road Transport Corporation should be limited to 5 per cent and the profits over and above this percentage utilised for the provision of amenities to the travelling public, welfare of the employees and road development. In the Bombay State Road Transport Corporation, the railways have so far invested Rs. 101.70 lakhs.

The Administrative Inquiry Committee, which was set up by the Government of Bombay, had recommended that a separate Corporation, more or less an autonomous body, be set up for operating the nationalised road transport services. Pending formation of such a body on the strength of a legislation of the Parliament, the Government of Bombay started the work departmentally and appointed a Committee of high Government officials to administer the actual working.

On 8th December 1949, a Corporation was formed under a Government notification. It was called the Bombay State Road Transport Corporation and was established under the Road Transport Corporation Act passed by the Indian Parliament in 1948. The Corporation Board was comprised of 5 non-officials inlcluding the Chairman, 3 Government officials and 1 representative of the railways. Subsequently, this formation of the Corporation vis-a-vis the Road Transport Corporation Act, 1948 was successfully challenged in the courts of law, and, therefore, the Road Transport Corporation Act was amended in 1950 remedying the defects of the Act. Soon after the elections of 1952, a new Corporation was set up under the new Act. It had 6 non-official members including the Chairman, five official members including two railway representatives and 3 representatives of the Government of Bombay.

The Corporation is aided by various sub-committees to ensure sound management. Thus, the Technical Advisory Committee advises the Corporation on all matters related to vehicles, machinery parts and such other matters on which technical advice is essential. The Divisional Advisory Committees consisting of representatives of the local population in the division provide an excellent link between the Corporation and the public. The Central and Divisional Selection Committees advise the Corporation on matters relating to the recruitment of staff. And lastly, the Valuation Committee evaluates the assets of private operators to be taken over by the Corporation.

## The Administrative Set-up

The administrative set-up of the Corporation consists of the following units :

1. Central Office,
2. Central Stores,
3. Divisions, and
4. Central Workshops.

The Central Office and the divisions are divided into various departments. The Divisional Controller is the head of the division for administration while the functions of the various departments are controlled by the respective departments in the Central Office. The Departments according to the functions are as follows :—

1. Administrative Department,
2. Transportation Department,
3. Mechanical Engineering Department,
4. Accounts Department,
5. Statistical Department,
6. Security Department and
7. Civil Engineering Department.

All these departments have their counterparts in the divisions while there are two more departments attached only to the Central Office. These are (1) the Secretarial and Legal Department and (2) The Public Relations Department.

All the departments are generally responsible to the General Manager who is the executive officer of the Corporation. The administrative head is the Motor Transport Controller, who is a nominee of the Government of Bombay.

## Working And Progress

The State Transport operated its maiden service in June 1948 in the Ahmednagar pocket with 36 vehicles and operated about 8 routes with a route mileage of 310. 1948-49 was the first year of operation and at the end of this year, the State Transport was operating in five divisions, *viz.*, Poona, Sholapur, Ahmedabad, Nadiad and Bijapur, covering 150 routes with a route mileage of 5,569.

At the end of the second year, *i.e.*, 1949-50, Ratnagiri, Ahmednagar and Belgaum were added to the list of the divisions taken over, and the number of routes increased to 369 with a route mileage of 11,736.

In the third year of operation, *i.e.*, 1950-51, three more divisions were taken over, *viz.*, Nasik, Bombay and Kolhapur. This increased the number of routes to 581 with a route mileage of 19,153 miles.

1951-52, *i.e.* the fourth year of the operation added one more division and spent most of the money on consolidation of the divisions already under possession. The number of routes rose to 819, with a route mileage of 40,354.

During the course of its 6 years' operation the total fleet rose to 2,442 passenger vehicles, plying daily over 1,70,000 miles. The total capital invested so far comes to more than Rs. 9 crores.

The State Transport is active through practically the whole of the State, excepting perhaps small portions in the North Gujarat. The State of Bombay is actually strewn all over with numerous bus stations, depots and garages, daily catering to the transport needs of over a crore of people.

The progress achieved, it must be admitted, was not as it was planned initially. The scheme according to the original plan was to be completed within three years of its inception. This could not be achieved mainly due to the fact that the field and scope of operation was too large as compared to the original estimates. Secondly, the flow of the chassis from foreign countries was not continuous and this greatly hampered the progress as per plan. Thirdly, the workshops, depots, garages and such other ancillaries could not be built up in proper time. Lastly, inadequate finances also contributed to the slow progress.

## SUCCESS

How far this experiment of the Government, first of its kind in India, is successful is a question one would like to ask. There cannot be any simple *a priori* answer to the question. The question may well be put in other words, *viz.*, Has the State Transport achieved any, if not all of the declared objectives ? The answer will be in the affirmative on most of the counts.

## EFFICIENT & ADEQUATE TRANSPORT

Efficiency is a relative term and can best be described as an improvement over the past. It has, therefore, to be assessed from time to time. State Trasport services are a distinct improvement over the services that were available in the pre-nationalisation period. Lesser breakdowns, fewer accidents, regular services are the factors that constitute efficiency. In the absence of any statistical data in these respects, before the nationalisation, a comparison is not possible. However, breakdowns at the rate of less than 2 per 10,000 miles, accidents at the rate of less than 1 per lakh of miles, and highly regular services—85-90 per cent being regular—speak of high efficiency of operation. Apart from these, numerous specific amenities have also been extended to the travelling public. Comfortable cushioned seats and spacious buses with no overcrowding have made travelling a pleasure. Advanced booking facility has relieved the travellers of the anxiety about accommodation. Strict enforcement of the speed limits has made travel safe. Breakdown vehicles render quick help in case of breakdowns and stand-by vehicles meet an unexpected rush. First-aid boxes and complaints and suggestions books, and above all courtesy as the travellers' right are all amenities which the State Transport can be proud of.

As regards the adequacy of transport it is yet another explicit responsibility of the State Transport. However, the problem of determining the appropriate standard of service depends on factors like the quantity and quality which could only be commensurate with the price that the travellers are prepared to pay. More and more services and better facilities are always to be conceded to the consequent increase in the cost. And it is, therefore, left to the transport authorities to determine for themselves what was meant by adequate service with due regard to the effect on price. The State Transport has devised a measuring-rod to measure the traffic potentiality of a particular trip. This is termed as the load factor. The load factor is the ratio of actual earnings to the expected earnings at 100 per cent loading from end to end of a trip. It may well be argued that a public utility concern designed solely to serve the public should not give any consideration to such things as the load factor but the convenience to the public should be the only guiding principle in running the service. The State Transport, in short, should be put in line with the Government departments for Education, Police, Medical Services, etc. and receive Government subsidy and serve the public. It is, however, obligatory on the State Transport to make its services paying for themselves. On some routes the load factor has been as low as 50 per cent. The ideal load factor is considered to be 83-85 per cent. Anything below this average will mean uneconomic services unless the basic fare of 9 pies per seat mile is revised upwards. Thus a large scale rural transport can hope to be economical only if wasteful running of vehicles is minimised by planning the requirements of service based on scientific data of traffic potentiality as indicated by the load factor. There are also cases when the State Transport has run services only to link the remotest villages without any considerations of the load factor. This is also an accepted measure of operational economy in countries like the U.S.A. Even though the time-tables are based as far as possible on the load factor data, they have always been framed in consultation with the Divisional Advisory Committees, passenger organisations and public bodies like municipalities, local boards and village panchayats, wherever possible.

## MAXIMUM COMFORT

Spacious buses with comfortable and cushioned seats, well ventilated bodies, adequate space for head room and leg room, booking offices with advance booking facilities, water arrangements, sanitary facilities, canteens, waiting-rooms and bus stations have made motor transport journey definitely comfortable.

## CO-ORDINATION WITH THE RAILWAYS

In consonance with the policy the State Transport has always endeavoured to locate its bus stations in the vicinity of the railway premises and rail heads. With the co-operation of the railway authorities, it has been possible to establish a number of bus stands, even within the railway premises. Out agency system has been introduced in many places where rail-cum-road tickets are issued. It has completely avoided competition with railways and has offered its services whenever the railways found it difficult to clear off traffic on special occasions like fairs and festivals. During railway accidents and breakdowns the State Transport has operated relief services to carry stranded passengers.

## EMPLOYMENT

Since the nationalisation workers employed in the motor transport industry scattered over the whole State have been brought together under one Union and this has given them the strength and opportunity to bargain effectively for better terms. Reasonable wages and hours of work have been fixed. Labour awards have fixed the rate of various extra allowances. The workers have been given regular weekly offs and are entitled to casual and earned leave. Regular grades of pay with Provident Fund facilities and security of services have all made employment in the State Transport what it should be. In addition to this the State Transport has offered various amenities to the workers which include labour welfare centres, libraries, canteens, rest rooms, sports clubs, co-operative societies and various social functions. It has also done its part in providing housing accommodation and medical relief to them. Travel at concessional rates and incentive schemes to the workers can also be added to the list of amenities. The State Transport is also generally regulated by the various labour laws.

## SELF-SUPPORTING

Operations have got to pay their own way and it is gratifying to note that the State Transport has been successful in this respect also. It is still more creditable because the rate per seat mile has been fixed and the State Transport has to manage its way in the face of many adverse conditions.

Four major factors constitute these adverse conditions :

1. Increased prices of articles used by transport organisations.
2. Growing demands of labour and the various labour awards, which have continuously increased the financial burden on the State Transport.
3. The increasing percentage of operation on bad roads.
4. Ageing of the vehicles.

Since the inception of the State Transport prices of practically all the items have increased. The increased import duties, as also the devaluation of the rupee in 1949 made foreign articles costlier. The Government of Bombay preferred to increase the motor vehicles taxes and this also added to a great extent to the increase in the cost of operations.

The state-wide organisation of the State Transport gave increased opportunities to the workers to unite. The workers put up various demands for increase in allowances and pay and the State Transport had to concede to many of these .It is estimated that these labour awards have cost the State Transport nearly Rs. 4 lakhs annually.

With the expansion of nationalised services, as a burden of monopoly obligation, the State Transport has taken over every route in an area whether it was economic or uneconomic to operate, whether the road was pucca or kutcha, and with a larger proportion of routes on bad and kutcha roads under operation in the subsequent years, the costs on fuel, repairs and maintenance have gone up tremendously.

By and by, as the vehicles became old, the cost of repairs and maintenance also grew and that is a natural result of the vehicles growing older.

Inspite of all these difficulties, the State Transport could manage to keep its costs below the statutory limit and also provide for reasonable profits. It will be interesting to note the various devices adopted by the authorities to counteract the increasing costs. These were :—

1. Rationalisation of services to avoid wasteful duplication.
2. By experience it was found that diesel driven vehicles cost very much less to operate than the petrol driven vehicles. All the petrol driven vehicles were, therefore, to be converted into diesel driven ones by fitting them with diesel engines.
3. Expansion of incomplete divisions so as to fully utilise the overheads.
4. Standardisation of the staff structure so as to ensure maximum utilisation of manpower.

5. Introduction and enforcement of systematic and improved methods of maintenance of vehicles by experiments and internal training schemes.

It must be particularly mentioned here that the State Transport is not exempt from any taxes and such other Government dues. The Profit and Loss Account and the Balance Sheet of the State Transport are drawn after due provisioning of all charges such as depreciation, insurance, interest due to the Government for their contributions and such others as are normally included in the Profit and Loss Account of any commercial undertaking.

The annual accounts of the State Transport have been showing profits consistently since its inception. The profits were as follows :—

| Year | | Govts'[1] investment | Return[2] on investment to the Govts | Net profit[3] accrued to the S.T. |
|---|---|---|---|---|
| | | | (*in lakhs of rupees*) | |
| 1948-49 | ... | 186·74 | 3·40 | 7·93 |
| 1949-50 | ... | 191·66 | 13·22 | 13·51 |
| 1950-51 | ... | 154·93 | 21·26 | 1·17 |
| 1951-52 | ... | 78·75 | 26·89 | 1·16 |
| 1952-53 | ... | 252·01 | 30·36 | Not availble |
| 1953-54 | ... | 150·00 | 40·59 | ” |

## Better Travelling Facilities

It is a statutory obligation that the net profit accrued to the State Transport is to be reverted back to the public by way of amenities and better roads. The profits are to be partly credited to a fund called the "Amenity Fund" and the balance to be turned over to the Government for road development. It is true that the State Transport so far has not been able to credit anything substantial to these. However, the State Transport has already modernised the 22-mile Nadiad-Dakor road at a total cost of approximately Rs. 25 lakhs.

---

[1] Bombay Govt. and the Central Govt.

[2] Governments receive from the S. T. interest on their investments.

[3] Net profit means which accrues to the S. T. and not to the Govts.

Note: Total capital expenditure of the S. T. is not the same as the Government's contribution to the S. T.

## FINANCES

The original estimate when the State Transport scheme was first prepared, was Rs. 5.33 crores for complete nationalisation. Of this total, 75 per cent was to be contributed by the Government of Bombay and 25 per cent by the Centra Government. If the coastal shipowners desired to participate in the scheme they were to be allowed 5 per cent ou of the 25 per cent quota of the Central Government. The shipowners, however, did not participate in the scheme.

The Road Transport Corporation Act lays down that the capital is to be provided by the Government which will be entitled to interest on the same. The State Transport is also authorised to raise share capital over and above the contribution of the Government. It is also authorised to raise loans to finance the working capital. The State Transpor has not raised any capital by issuing shares but has floated so far, two debenture loans of approximately Rs. 1 crore each to finance the working capital.

The nationalisation of road transport appeared at firs as a scheme in the post-war reconstruction programme of the Government of Bombay. When the first Five Year Plan came into operation from 1st April 1951, the scheme was absorbed in the same. The total expenditure by then was about Rs. 574.66 lakhs, while the Government's allotment to the same equalled the full quota previously decided upon *i.e.,* Rs. 533. 33 lakhs.

During the course of the three years of the Plan, *i.e.* three years ending 31st March 1954, the scheme has shown considerable progress. The total capital expenditure amounted to nearly Rs. 9 crores from the inception and a little over Rs. 4 crores during the three years of the Plan. This expenditure, it appears, has no bearing whatsoever on the allotment made for the nationalisation of road transport as such, in the first Five Year Plan. The Planning Commission has provided Rs. 2 crores for this scheme to be expended by the State Government. However, as the scheme was already started even before the launching of the Five Year Plan, and is likely to extend even beyond the period of the Plan, the Government had to find additional sums for expenditure on the scheme. The scheme is estimated to cost well over Rs. 18 crores and spread over many more years depending upon how the finances are made available to the Organization.

Apart from this normal contribution by the Government the State Transport had been able to secure financial help under the Colombo Plan. Under this Plan, the Government of India is to receive Canadian chassis and other auto material worth about Rs. 2.0 crores as a gift from Canada. This entire gift has been passed on to the State Transport as a loan recoverable in instalments, starting after the end of five years. This material includes goods trucks, trailors and tractors in addition to chassis for passenger vehicles. The Colombo aid has thus greatly facilitated the consolidation of the existing operations and expansion in the new areas. It has also initiated the machinery of the second part of the nationalisation of road transport scheme, *viz.,* the nationalisation of the goods transport in the State of Bombay.

However, a very recent press report (3-9-1954, Times of India) indicates that Bombay will not be able to nationalize road freight services. The Planning Commission is understood to have rejected an application by the Bombay Government for permission to establish a monopoly for road haulage of freight on certain routes.

The Commission is believed to be averse to nationalisation of road freight services for at least another five years.

It has also turned down the Bombay Government's request for a loan of Rs. 371 lakhs for augmenting its passenger transport fleet by 500 vehicles.

At the 14th Meetting of the Transport Advisory Council held in New Delhi on 3rd November, 1954, Mr. Lal Bahadur Shastri, the Union Minister for Transport and Railways disclosed that almost all State Governments, with the only important exception of Bombay, had agreed with the Planning Commission's view that the nationalisation of goods transport should be deferred until the end of the second Five Year Plan. The objection of the Planning Commission to the nationalisation of goods transport for the present is as yet not disclosed. We feel that it is probably based on the guiding principle of the Planning Commission that State enterprise should be confined to fields where private enterprise is shy to come forward. In the carriage of goods by road private enterprise is clamouring against statisation and that probably is the reason of the Planning Commission's recommendation to the States to defer its nationalisation at the moment.

# RAILWAYS IN INDIA

## THE SITUATION ON THE EVE OF THE FIRST WORLD WAR

The period from the beginning of this century to the first World War was characterised by the rapid extension and development of railways in India. In 1905 the Railway Branch of the P.W.D. was abolished and a Railway Board was created in the Department of Commerce and Industry. Further, railway development received a fresh impetus by the recommendations of the Mackay Committee on Railway Finance (1908). The recommendations laid down £12.5 million as the standard for the annual programme for capital expenditure on railways. This standard was, however, not attained by Government although it spent much larger amounts on railway development annually than hitherto. The railway mileage, too, increased considerably during this period. From 24,752 miles in 1900 it rose to 34,656 miles on the eve of the first World War.

This period is also remarkable for the fact that the railways now entered an era of profits. They had almost continuously incurred losses in the first forty years of their existence. From 1900 onwards railways began to make profits.

By 1907 the Government had purchased all the major lines and leased them to private companies for the purposes of management. Thus the private companies, by now, had become only managing agencies working the lines for the Government of India. However, the public opinion was in favour of state management on the grounds that it would be more economical.

## AFTER 1914

During the war the railway position became worse. There was a heavy strain on the railways on account of the transportation of troops and materials at high priorities. This strain was accentuated due to lack of rolling stock and staff. India was called upon to supply these in East Africa and other theatres of war. This was also the time when the Government could not keep up the annual development programme because of the general financial embarrassment caused by the war. The difficult shipping conditions, as also the concentration of England on war efforts made it extremely difficult to import any railway material from England. It was impossible even to repair and maintain the existing lines, let alone construct fresh ones. Railway workshops were busy producing high explosive shells, hospital trains and other war equipment. On the whole the Indian railways emerged from the war in a battered condition. The precipitate fall in the general efficiency of the railways resulted in wider and deeper public discontent and dissatisfaction. The public opinion was becoming more and more hostile to the management of the State railways by English domiciled companies. Resolutions moved in the Imperial Legislative Council in 1914, 1915, 1917 and 1918 demanded the appointment of an expert committee to go into the question of the desirability of adopting state management.

## THE ACWORTH COMMITTEE

In 1919 the contract of the East Indian Railway Company was due to expire. The contracts of some other companies were also due to expire within a few years. The Government, therefore, thought that the time was opportune for an inquiry, and appointed the East India Railway Committee (1920-1921) with Sir William Acworth as Chairman, in November 1920, 'to recommend suitable methods of management, to examine the functions, status and constitution of the Railway Board and the system of Government control over the Railway administration, to consider arrangements for the financing of railways in India, and to make such other recommendations that may seem germane to the enquiry.

## The Question Of State Management

The recommendations of the Acworth Committee are important because they laid the foundations of State management and State control on Indian Railways. A broad structure of centralised railway administration was laid down and the entire system of railway financing was rationalised.

Of the ten members of the Committee three were Indians, *viz.*, Mr. V. S. Shrinivasa Sastri, Sir Purshottamdas Thakurdas and Sir Rajendra Nath Mukerjee.

The Committee could not arrive at a unanimous recommendation relating to the important question of the State taking over the control and management of State-owned railways. The Chairman and four other members were in favour of State control and State management. The other five members including Sir Rajendra Nath Mukerjee expressed their strong opposition to the above view.

However, the Committee was of the unanimous opinion that "the English companies shall be brought to an end on the broad ground that they represented a system essentially unworkable,and...that the property entrusted to their management is not their own and their financial stake in the undertaking is relatively very small....A large section of Indian public opinion supports the adoption of this System (State management) because they believe that company management does not encourage the development of indigenous industries by sufficiently favourable treatment, that it gives preferential treatment to import and export goods; that under the present system of company management large profits are made by British interests and that hitherto the companies have not employed Indians in higher appointments, except to a very limited extent and have not granted them adequate facilities for technical training....There is also in addition a positive feeling caused by an awakened national self-consciousness that Indians should have more control of the management of the railways in their own country." Some members of the Committee, however, recommended that the English domiciled companies should be replaced by Indian domiciled companies. This alternative they thought would be more acceptable to the Indian public opinion.

The Chairman and his four colleagues wrote, "We attach great importance to the fact that Indian public opinion is against company management and this not only on the general ground that Indian opinion is entitled to great weight on a question such as this, but for another reason of great practical importance. It is by money secured by the Indian tax payer that the Indian railways have been almost entirely built. It is the Indian public that uses the railways and pays the railway rates and fares. It is the Legislative Assembly at Delhi which under the new Constitution votes the Railway Budget. It is of the utmost importance that Indian public opinion should not be prejudiced against the railway management....Conditions in India being what they are, we have failed to find any solution of the problem submitted to us consistent with the retention of company management. We, therefore, do not hesitate, though most of us have approached the question with a strong pre-possession in favour of private enterprise as a general proposition, to recommend that in India the State should manage directly the railways which it already owns".

## STATE CONTROL AND RAILWAY AUTHORITY

Having recommended state management the Committee had to consider the question of the structure of the railway authority. They weighed the pros and cons of a decentralised and a centralised authority and recorded that, "if there is one thing that railway history teaches more than any other, it is that centripetal forces are stronger than centrifugal; that segregation into ever larger units promotes efficiency and economy." The Committee, therefore, recommended that though there should be a considerable measure of executive decentralisation in the railway administration, the management and control should finally rest with one central authority.

While recommending one central authority the Committee summarised the structure of the existing railway authority as follows : "The Secretary of State representing the House of Commons was the ultimate authority for the governance of India. He delegated to the Governor-General in Council certain powers, reserving to himself others. The Government of India in turn delegated some portion of these powers to the Railway Board. Within the scope of these powers, the Railway Board were free to act, subject always to the approval of the Finance Department. The Railway Board at the time consisted of three members, the President having the responsibilities and the rights equal to those of a Secretary to Government. In certain spheres the President was supreme 'and the decision of the Board was, in fact, his decision', while in ordinary matters the Board acted jointly and took majority decisions permitting the dissenting member to append a minute explaining his position." Pointing out the defects in this structure the Committee commented that, 'the Railway Board is in effect in the position of a step-child and like most step-children, tends to be less well treated than the other children of the family. We are convinced that the Indian Railways will never be able to give a satisfactory account of themselves, to earn the revenue which they should earn, and to render to the public the service which they ought to render, until they are represented in the Viceroy's Council by a member who is in touch with their daily work.' The Committee was in favour of a Member of the Council for Railways but the Government of India delegated this work to the Commerce Member in the Viceroy's Council.

## THE RAILWAY BOARD

The Committee felt that considering the fact that the Indian Railways were responsible for earning one-third of the total Government receipts and one-fourth of the total expenditure, it was necessary that the Railway Board as the administrative authority of the railways should be properly constituted, with its position, powers and functions well defined. The Committee found out that the Railway Board was burdened with unnecessary routine work, which was more than what three men could cope with. The Committee thought that it was natural that witnesses in different parts of the country complained that the members of the Railway Board never visited them. According to the Committee the function of the Railway Board was not to carry out routine duties but to shape policy, to watch, to think and to plan. The Committee recommended the appointment under the Member of Council for Communications of an enlarged Board with a Chief Commissioner as the head of the Board. He should be assisted by four Commissioners, a Financial Commissioner and three Railway Commissioners in charge of the Western, Eastern and Southern Divisions. They further recommended the appointment under the Board of six Directors to be in charge of (1) Accounts, (2) Civil Engineering, (3) Mechanical Engineering, (4) Traffic Operating, (5) Traffic Commercial amd (6) Inland Navigation and Road Transport. The Board should have a General Secretary and a separate Statistical Department.

The Committee were of the opinion that the new central railway authority should enjoy a greater administrative and financial autonomy. The Committee introduced a bold emphasis on the commercial character of the railways and on the importance of operating railways on sound business principles. They felt that the defects and shortcomings of the Indian Railways were primarily due to the failure of the Government to provide railways with adequate funds for capital expenditure on development and extensions and even for essential operations, renewals and repairs.

## SEPARATION OF THE RAILWAYS AND THE GENERAL BUDGETS

At this time railway budgeting was a part of the general budget. This created immense difficulties and uncertainties both in the general budget and railway administration. It used to be said that the budget of the country was a 'gamble in the railways'. The railways also found that they could not keep up to their plans, which were dependent on the general financial position. The Committee wrote that, "the effect of this policy of inadequate allotment.........would have been bad in any case, but it is made worse, since as not infrequently happens, the allotment is suddenly cut down during the currency of the year to which it relates, and works in progress are suspended, staff are disbanded on a moment's notice, and materials are left lying on the ground for an indefinite period. An almost equally bad effect is produced when later on in the year, the general financial position having unexpectedly improved, the Finance Member with equal suddenness lifts his hand and thus encourages the railways to spend more freely."

The Committee pointed out that since the beginning of the century the railways had been making profits and left to themselves they would have provided all the money necessary for undertaking the essential plans of railway development. They, however, could not measure the harm that was caused to the country's economic development by the slow progress of the railways, but pointed out that the war was not a sufficient explanation for the treatment of Indian railway revenues in the last few years.

The Committee, therefore, recommended the separation of the Railway Budget from the General Budget of the country. The first charge on the income after paying working expenses, was to be interest of debt incurred by the State for railway purposes. After meeting this liability, the railway department should itself regulate the disposal of the balance, and it should be free to devote it to new capital purposes or to reserves or to dissipate it in the form either of reduction of rates or improvement of services.

## THE RAILWAY FINANCE COMMITTEE AND THE INCHCAPE COMMITTEE

The Government of India accepted the broad principles of the Acworth Committee and two Committees were appointed to suggest to them measures to implement its recommendations. These were the Railway Finance Committee under the Chairmanship of Lord Hailey (then Sir Malcolm) and the Indian Retrenchment Committee presided over by Lord Inchcape. The former Committee was charged with the task of considering the question of the separation of the Railway and the General Budgets and for planning the requirements of railways in regard to capital expenditure during the next ten years. The Inchcape Committee had to recommend economies in expenditure and ways and means for increasing revenue from railways.

The Railway Finance Committee urged the expenditure of larger capital funds for the immediate rehabilitation of the railways, for improvement of the existing lines and for the completion of works under construction. The Committee also recommended that the programme should be prepared on a five-year basis, the provision for each quinquennial period being considered about two years before the termination of the existing period. Similarly, moneys which were voted for a particular period should not lapse if they are not spent during that period but should be carried foward for being expended during the following period. They suggested an amount of Rs. 150 crores to be devoted to railway capital purposes during the next five years to be spent exclusively on rehabilitation and the completion of lines already under construction. The Inchcape Committee, however, expressed itself against this proposal on the grounds of financial stringency and laid down the general principle that further expenditure could only be justified if it could be satisfactorily demonstrated that this expenditure would increase the net earnings of the railways sufficiently to cover the additional interest involved. They wrote, "the country cannot afford to subsidise the railways, and steps should be taken to curtail working expenses as far as necessary in order to ensure that not only will the railways as a whole be on a self-supporting basis, but that adequate returns should be obtained for the large capital expenditure which has been incurred by the State." In their opinion a return of five and a half per cent could not be regarded as excessive. The other recommendations of the Inchcape Committee were the creation of a depreciation fund, greater decentralisation of control and a thorough investigation into the railway accounting system. The Committee also supported some of the recommendations of the Acworth Committee relating to the reorganisation of the administrative system.

## GOVERNMENT ACTION ON THE REPORTS

The Railway Board was reorganized in 1922 on the lines suggested by the Acworth Committee. In September 1924 the Government accepted a resolution of the Legislative Assembly regarding the separation of the railway finances from the general finances.

According to the scheme of this separation, railways had to ensure to the general finances a definite ascertainable annual contribution, which was to be the first charge on their net receipts. The basis of this contribution was one per cent on the capital at charge of commercial lines at the end of the penultimate financial year, plus one-fifth of the surplus profits in that year, interest on capital at charge of strategic lines and loss in working being deducted. In computing the capital at charge, the capital contributed by companies and Indian States was to be deducted.

The resolution also stipulated that if after payment of the contribution so fixed, the amount available for transfer to the railway Reserve should exceed Rs. 3 crores, one-third of the excess should be paid to the general revenues. The Railway Reserve, the resolution stipulated further, should be used to secure the payment of the annual contribution to general revenues; to provide, if necessary, for arrears of depreciation and for writing down and writing off capital; and to strengthen the financial position of railways in order that the services rendered to the public may be improved and rates may be reduced. The first separated Railway Budget was presented to the Assembly in March 1925.

In February 1923 the Legislative Assembly recommended that the State should take over the management of the East Indian Railway and the G.I.P. Railway Companies. Accordingly the Government of India took over the management of the former on the 1st January 1925 and of the latter on the 30th June 1925.

## RAILWAY DEVELOPMENT SINCE 1922

These were revolutionary changes which inaugurated a new phase of railway development in India. The State took over the whole of the railway system, except a few light railways, under its own management. In spite of the limited powers of the Legislature every phase of railway activity and every aspect of policy came up for discussion, with the result that the railway administration in general and railway policies in particular were open to legislative scrutiny and public criticism. This was also the juncture when organised labour began to grow in influence and consciousness of national self-respect and dignity on the part of passengers and the general public were quite in evidence.

From 1922 to 1930 the railways enjoyed a period of exceptional prosperity. This was followed by an unparalleled depression and the second World War. The aggregate railway mileage in 1924 was 38,039. This compared very unfavourably with the target of 1,00,000 miles designated by the Mackay Committee in 1908. In 1924, Sir Charles Innes (the then Member in charge of Railways in the Viceroy's Executive Council) proposed a 5-year plan of constructing at least 1,000 miles of new track every year, besides rehabilitation and overhaul of existing equipment. By 1928-29 this annual target was exceeded and in that year 1,282 miles of new track were opened for traffic. However, in spite of the prosperous period only 5,360 miles of new track were added between 1924 and 1932, at a cost of Rs. 122.89 crores. An additional sum of Rs. 75.29 crores was spent during this period on renewals and replacements.

This period is also notable for the opening of the electric lines. The first electric line was opened on the 3rd February 1925 between V.T. and Kurla on the Harbour Branch section of the G.I.P. Railway. Soon the B.B.C.I. and G.I.P. Railway suburban sections were electrified, followed by the electrification of the main lines from Bombay to Igatpuri and Bombay to Poona.

This was a period of exceptional prosperity and, in fact, the Member of the Council, in presenting the Railway Budget for 1926-27 complained that "the principal difficulty with which we are now confronted is that of spending the money, that is, of executing rapidly, sanctioned projects." The Railway Board consequently introduced the over-allotment system by which it was intended to encourage rapid expenditure. Under this system lump cuts were made in the estimates submitted by the railway administrations, who were, however, told that they could spend up to the amount they had originally asked for in the budgets. The agents were authorised to start new schemes, for which moneys were sanctioned even before the plans of the proposed schemes were ready.

All this led to financial extravagence and several schemes, when completed cost the railways much more than even the original estimates. Most of the schemes could hardly be justified on the grounds of financial prudence or sound business practice. By 1931-32, while the capital at charge had increased only by 25 per cent, interest charges had gone up by 40 per cent. Similarly, the operating ratio of the railways which had fluctuated between 46 and 57 per cent even in the abnormal period after the first World War, now rose and moved in the limits of 65 and 76 per cent.

However, the railways made substantial surpluses available to the State. From a surplus of only Rs. 11 lakhs in 1900, the average annual surplus had risen to Rs. 11.48 crores in 1920. From the Separation Convention in 1924 to 1931 the annual contribution by the Railways to the general finances amounted to Rs. 5.9 crores per year. The expenditure remained steady after 1932 but the gross earnings of the railways recorded a rapid fall. During the depression the railways were hit hard and between 1930-37 only one contribution of Rs. 5.74 crores was paid by the railways to the general revenue in 1930-31. The rapid deterioration of the railway finances set the Government thinking.

## THE WEDGWOOD COMMITTEE

In 1936, therefore, the Government of India appointed the Indian Railway Enquiry Committee, with Sir Ralph E. Wedgwood, Chief General Manager, London & North-Eastern Railway, as the Chairman. The Committee were asked "to examine the position of Indian State-owned railways and suggest measures to secure an improvement in net earnings and at a reasonable and early date place railway finances on a sound and remunerative basis."

The Committee surveyed the financial and operational developments since 1919. It made several recommendations with a view to promoting greater economy in expenditure and to increased efficiency in operation. It also laid down a more rational basis for the assessment of the Depreciation Fund. The Committee felt that a normal balance of Rs. 30 crores in this Fund could not be considered to be excessive. It also recommended the creation of a general fund to serve as an equalization fund for the payment of interest charges and amortization of capital. The Committee suggested the development of the commercial departments of the railways, and the appointment of a proper machinery for publicity and public relations in order to increase the popularity of the Indian Railways.

## THE RAILWAY RATES POLICY

The railway rates policy in India has been the subject of much criticism throughout the history of the railways. It has been contended that the railway rates policy was always determined by the financial considerations of the railway companies and further that they have always discriminated against Indians and Indian enterprise and in favour of the Europeans. These complaints were voiced several times on the floor of the Legislative Assembly, and before the Industrial and Fiscal Commissions and the Acworth Committee.

It was argued that the railways framed their rates so as to encourage traffic to and from the ports at the expense of internal traffic, thereby encouraging the export of raw materials and import of foreign manufactures. The Indian businessmen also voiced their complaints regarding unfair treatment meted out to them by the railways by which they had to pay higher rates both for obtaining raw materials from different parts of the country and for sending their manufactured goods to the ports to be exported abroad. They also complained bitterly against the *block rates* system by which the railways attempted to retain traffic on the line on which it originated and to prevent or *block* the same from passing off on to a rival route. It was also alleged that the railway rates policy was in no small way responsible for the concentration of industries in the ports and causing the consequent horrors of congestion, etc. The railway rates policy was also alleged to have been working to the detriment of water transport in the country.

From the reports of the Industrial Commission, the Fiscal Commission, the Agricultural Commisson, the Acworth Committee and the Wedgwood Committee, we find that these charges and complaints regarding railway rates were not entirely without foundation. The Industrial Commission recommended that this discrimination in railway rates should be removed and the internal traffic should be rated on the basis of equality rather than of any other consideration. They also emphasised the necessity of encouraging the transformation of raw materials, into the most finished stage possible before export. The Agricultural Commission also made recommendations regarding railway rates. They urged a closer co-operation between the railways and the Agricultural Departments. They recommended that the railways should give concession in rates to transport of fertilizers, fuel, fodder, milch cattle, etc. They also said that the railway rates on the transport of and on raw materials for, agricultural machinery and implements should be re-examined. The Government accepted some of these recommendations. The Wedgwood Committee said in their report that the structure of rates on the Indian railways was cumbrous and illogical and called for drastic simplification.

## RATES ADVISORY COMMITTEE

On the recommendations of the Acworth Committee the Government appointed in 1926 a Rates Advisory Committee to investigate and to make recommendations on :—

(*i*) complaints regarding undue preference,

(*ii*) complaints about the rates being unreasonable in themselves,

(*iii*) complaints or disputes regarding terminals, and complaints that railway companies do not fulfil their obligations to provide reasonable facilities to trade,
(*iv*) the reasonableness or otherwise of any conditions as to the packing of articles specially liable to damage, or liable to cause damage,
(*v*) complaints in respect of conditions as to packing attached to a rate.

The Committee is purely an advisory body and the Government is not bound to accept its findings. In 1940, the Government simplified the procedure of the Committee and made it more expeditious, as recommended by the Wedgwood Committee.

## The Federal Railway Authority

The Wedgwood Committee had made certain recommendations regarding the Federal Authority, provisions for which were already made in the Government of India Act 1935. It was provided that the Federal Government and Legislature should exercise a general control over railway policy and that the actual administration of both the Government and company operated railways should be placed in the hands of a statutory authority which was to be the executive authority of the Federation regarding the regulation, construction, maintenance and operation of the railways. The recommendations of the Committee in respect of the federal section of the 1935 Act were never put into operation. Some other recommendations, however, became the basis of an Act of the Central Legislature, by which the powers of the Railway Board were expanded and its autonomous character further defined and stressed.

## World War II And Indian Railways

The Indian railways were in a bad way during the depession years and could not even meet their interest liabilities from their revenues, so steeply had the revenues fallen. The railways had drawn heavily on the Reserve and Depreciation Funds. The conditions became so serious that in 1935-36 the railways were excused from making the stipulated contributions to the general revenues. They also postponed from year to year the renewals and replacements, which were reduced to barest minimum consistent with safety of operation.

The year 1937 showed signs of improvement and when the second World War broke out the railways were endeavouring to clear up the arrears of renewals and maintenance.

"In the first phase of the war, the Indian railways, despite the shortage, had to release wagons, locomotives and track materials for the Middle East. Over 8 per cent of the metre guage locomotives, 15 per cent of metre guage wagons, 4,000 miles of track, and 4 million sleepers were released for use overseas and in India on military projects. For this purpose, the railways were obliged to dismantle as many as 26 branch lines.

"In the second phase of the war, India became the base for the offensive against Japan and a large number of railway workshops had to be diverted to the manufacture of munitions and other items required for war. In these circumstances, abnormal arrears of renewals and replacements accumulated, and internal facilities for rehabilitation were appreciably curtailed or incapacitated by the mobilisation and intensive utilisation of workshop equipment in connection with the requirements of the war."[1]

## THE PARTITION

With the war over, new problems for the railways came up in the wake of the Partition of the country on the 15th August 1947. The North Western Railway was divided between India and Pakistan. This deprived our country of the majority of workshops, and maintenance and repair facilities. The division of the Bengal Assam Railway resulted in leaving the Assam Railway without any workshop or a link with the rest of the railway system. The port of Karachi was made over to Pakistan, and consequently traffic was diverted to Bombay causing a great deal of congestion and creating a transport bottleneck in the Bombay Port. This problem had to be tackled by the development of a major port at Kandla and the construction of the Kandla—Deesa rail link. "Thus", observes the first Five Year Plan, "the problem of rehabilitation and replacement created by the post-1930 economic depression, neglected by the special features of Partition has become the major concern of the railways."

---

[1] First Five Year Plan, Planning Commission, p. 462

The following figures give a rough idea of the effects of the Partition on the Indian railways.

| | | 1946-47 | 1947-48 |
|---|---|---|---|
| Mileage open | ... | 40,524 | 33,985 |
| | | (*Rs. in lakhs*) | |
| Capital at charge | ... | 63,927 | 74,220 |
| Gross earnings | ... | 16,707 | 18,369 |
| Working expenses | ... | 12,842 | 16,394 |
| Net earnings | ... | 3,865 | 19,75 |

## RAILWAY REHABILITATION

Railway development under the Five Year Plan is necessarily coloured by the great magnitude of the rehabilitation problem. The Indian railways have an abnormal proportion of overaged rolling stock. By 31st March 1951 arrears of renewals had accummulated to 1,050 locomotives, 5,514 coaching vehicles, and 21,418 wagons. As against these, the normal figures of average annual renewals are 190 locomotives, 650 coaching vehicles and 5,000 wagons. The state of immobile equipment is equally bad. The track is deteriorated and speed restrictions still continue as track renewals have accumulated in arrears.

The urgency of rehabilitation is further emphasised by the demands made on the railways by the enormous increase in the volume of traffic. From 17,780 million in 1938-39 the passenger miles on Class I railways increased to 39,720 million in 1950-51. Similarly, the freight carried increased from 21,786 million ton miles to 26,581 million ton miles during the same period.

## PROGRESS OF ROLLING STOCK SINCE PARTITION

The following figures given in the First Five Yean Plan show that in the four years of the post-Partition period efforts at rehabilitation have fallen short of the needs of the situation.

*New Railway Stock (Units)*

| | 1946-47 | 1947-48 | 1948-49 | 1949-50 | 1950-51 |
|---|---|---|---|---|---|
| Locomotives | 518 | 28 | 104 | 412 | 293 |
| Coaching vehicles | 120 | 156 | 238 | 337 | 479 |
| Goods wagons | 14,580 | 5,424 | 2,522 | 1,443 | 3,106 |

## CHITTARANJAN WORKSHOP[1]

With a view to reducing dependence on external sources of supply the Government of India have set up a workshop for the construction of locomotives at Chittaranjan at an estimated cost of about Rs. 15 crores. The eventual production target in this workshop is set at 120 locomotives and 50 spare boilers per year. The Government have also extended financial assistance to the Tata Locomotive Engineering Company by participating in its capital structure to the extent of approximately Rs. 2 crores.

---

[1] First Five Year Plan, Planning Commission, p. 464.

## FINANCING THE RAILWAY PLAN[1]

In order to deal with the accumulated arears of maintenance and rehabilitation and to provide for an immediate programme of development for meeting the minimum obligations of the railways as a public utility concern, it is proposed that the Railway plan for the five-year period should provide for an average expenditure of not less than Rs. 80 crores a year or Rs. 400 crores in the aggregate. Further, from a provision of Rs. 50 crores made for basic industries and transport certain additional railway development is expected to be undertaken.

Of the total expenditure of Rs. 400 crores, the contribution from the Central revenues will be Rs. 80 crores and the balance of Rs. 320 crores is expected to be raised by the Railways from their own resources.

## RAIL TRANSPORT EXPANSION SINCE INDEPENDENCE[2]

More than a thousand miles of the permanent way have been added to the Indian railway sysetm since independence and another thousand odd miles have been planned, a good portion of them being already under construction.

All the new construction effected since independence has cost more than Rs. 25 crores, while under the first Five Year Plan it is proposed to spend Rs. 28.52 crores on new lines.

---

[1] First five Year Plan, Planning Commission, p. 466.

[2] Press extracts of a radio speech of Shri Lal Bahadur Shastri Minister of Transport.

At the time of independence, the Indian railways with a total mileage of 33,556, the third largest in the world, faced four sets of problems. In the first place, they had to restore twenty-six branch lines totalling 858 miles, which had been uprooted in war time. Secondly, partition brought on urgent strategic problems and the need to overcome by new construction the virtual isolation of Assam. Thirdly, a number of areas which had long been awaiting railway connection for their economic development had to be opened, the question of constructing links between already existing lines being the most urgent among them. Lastly, under the growing impetus for industrialisation and the Five Year Plan new projects and production units were developing demanding construction of new Railway lines.

The success achieved in tackling all these different problems forms the core of the Railway record during the last seven years. The old dismantled lines are being restored as far as possible, and wherever necessary, the allocation under the first Five Year Plan for this purpose alone being Rs. 5.66 crores. Restoration of 286 miles has already been completed and it is expected thay by April 1956 nearly 75 per cent of the broad-gauge and metre-gauge lines and a good portion of the narrow-gauge lines will have been re-laid.

## ASSAM'S PROBLEM

Meanwhile, the problem of Assam's accessibility to India was solved by January 1950, when the railway administration had finished constructing the Assam rail link. This line which runs through a territory of mountains and forests interspersed with torrential rivers, tested the skill and morale of the Indian engineers, who were solely responsible for its construction. The engineers not only won, but succeeded in completing their historic undertaking in record time. Another need thrown out as an effect of Partition was met in the North-Western zone when the Mukerian-Pathankot line was built. This line has cut the distance between Delhi and Pathankot by 44 miles.

## NEW CONSTRUCTION

The programme of new construction also includes the opening of lines in areas so far neglected and while doing so, the linking together of lines, already existing. The two components of Travancore-Cochin State, Cochin and Travancore, are being linked for the first time by rail by the Quilon-Ernakulam line (96.5 miles) now under construction. The Chandigarh rail link has connected the new capital of the Punjab with the Ambala-Kalka main line. But the most important project in this category is the 187-mile Khandwa-Hingoli meter-gauge line which will provide a direct meter-gauge connection from Bhatinda in the North to Trivandrum in the South. At present the meter-gauge lines in the North, that is, on the North Eastern, Northern and Western Railways are separated from the meter-gauge lines in the South, on the Central and Southern Railways, and transhipment is necessary at several points. The new link will also help reduce traffic pressure on the broad-gauge system making the through movement of goods and passengers on a parallel system possible.

It will not be out of place to mention here the Ganga Bridge project which, though not a railway line, will yet provide a vital link between North Bihar and South Bihar by connecting the North-Eastern and Eastern Railways across the Ganga enabling the transport of essential supplies to North Bihar.

With the launching of the Five Year Plan, railway construction has naturally become closely integrated with all the other aspects of national economy. To help in the execution of some of the major development projects under the Plan and to meet the transport demands of newly developing industrial areas, a number of lines have been built, and more are under construction. The Gandhidham-Deesa line, built to help in the construction of the major port of Kandla in the Gulf of Kutch will remain an invaluable link between the port and its large hinterland. Similarly, the 116-mile Rupar-Nangal Railway has played an important role in the execution of the Bhakra-Nangal Project, while it will meet an essential need of the Sutlej valley which had earlier possessed no satisfactory means of transport. The Chunar-Robertsgunj line opened recently by the Prime Minister will similarly serve the Uttar Pradesh Government's cement factory at Churk and at the same time help in the construction of the Rihand Dam.

At the same time, surveys for seven new rail links totalling a distance of 310 miles have been carried out and surveys for seven more with a possible mileage of 400 are in progress.

INDIAN RAILWAYS OPERATIONS

| Year | Mileage open | Capital at charge | Gross earnings | Working expenses | Net earnings |
|---|---|---|---|---|---|
| | | *(Rupees in lakhs)* | | | |
| 1946-47 ... | 40,524 | 63,927 | 16,707 | 12,842 | 3,865 |
| 1947-48 ... | 33,985 | 74,220 | 18,369 | 16,394 | 1,975 |
| 1948-49 ... | 33,861 | 77,588 | 23,412 | 18,406 | 5,006 |
| 1949-50 ... | 34,022 | 81,307 | 25,832 | 20,723 | 5,109 |
| 1950-51 ... | 34,079 | 83,818 | 26,462 | 21,439 | 5,023 |
| 1951-52 ... | 34,119 | 86,155 | 29,414 | 22,759 | 6,655 |

## PROGRESS UNDER THE FIVE YEAR PLAN

The first three years of the Five Year Plan were completed on 31st March, 1954. The table given below shows the progress of the Railway Five Year Plan.

*(Figures in brackets are percentages, others are crores of rupees)*

| Items of expenditure | % age of plan allocation | 1st year 1951-52 (actual) | 2nd year 1952-53 (actual ) | 3rd year 1953-54 (revised estimate) | 4th year 1954-55 (budget) |
|---|---|---|---|---|---|
| Rolling stock & machinery | (52.2) | 34.36<br>(48.4) | 33.23<br>(55.2) | 45.06<br>(57.8) | 56.17<br>(59.1) |
| Track | (16.2) | 9.72<br>(13.7) | 13.46<br>(22.4) | 11.30<br>(14.5) | 12.38<br>(13.0) |
| Bridges | (1.4) | 1.00<br>(1.4) | 0.50<br>(0.8) | 0.72<br>(0.9) | 1.02<br>(1.1) |
| Other engineering works | (10.9) | 6.68<br>(9.4) | 7.24<br>(12.0) | 10.44<br>(13.4) | 13.42<br>(14.1) |
| Collieries & ports | (0.6) | 0.16<br>(0.2) | 0.10<br>(0.2) | 0.62<br>(0.8) | 0.94<br>(1.05) |
| Labour welfare & quarters | (6.0) | 3.74<br>(5.2) | 3.14<br>(5.2) | 4.97<br>(6.4) | 5.55<br>(5.8) |
| Restoration of dismantled lines | (1.4) | 0.50<br>(0.7) | 3.71<br>(6.2) | 4.77<br>(6.1) | 6.09<br>(6.4) |
| New lines and Works | (7.1) | 6.76<br>(9.6) | | | |
| Passenger amenities | (3.8) | 2.45<br>(3.5) | 2.34<br>(3.8) | 2.99<br>(3.8) | 2.85<br>(3.0) |
| Miscellaneous | (0.6) | 5.49<br>(7.8) | –3.54<br>(–5.8) | –2.99<br>(–3.8) | –3.42<br>(–3.5) |
| Totals ... | | 70.86 | 60.18 | 77.88 | 95.00[1] |

---

[1] Includes Probable earnings.

In 1955-56 a balance of Rs. 96.08 crores out of the Rs. 400 crores allotment will be available for distribution among the above items in the budget for that year.

The principal aims of the railway sector of the Five Year Plan are :—

(*a*) the rehabilitation necessary to recover prewar standards of efficiency;
(*b*) the removal of traffic bottlenecks and provision of additional facilities to met new traffic arising from the implementation of the Plan; and
(*c*) improvement in the amenities available to the public and in the housing and welfare of the staff.

In the railway sector of our Five Year Plan "Locomotives and machinery" is the largest item. When the Plan was inaugurated, 2,554 locomotives had already reached the end of their normal life. According to orders already placed under the Plan in India and abroad, and including those under the Colombo Plan and the Indo-U.S. Technical Co-operation Assistance, 1,504 new engines will have been received when the Plan period comes to an end. In addition, 107 ordered prior to the Plan will be available, or 1,611 in all, so that there will then be a balance of 943 locomotives in service but awaiting renewals. We must add to this figure 1,042 engines becoming overaged during the period of the Plan, making a total of 1,985 engines due for renewal on 31st March 1956, or 569 fewer than in 1951. It is expected that 8,800 engines will be required to move the traffic offering in 1956—as compared with 8,209 in service in 1951—so that a large number of overaged locomotives will still have to be retained in service after 1956. The position with regard to coaching and goods stock is more favourable and the proportion of overaged units that will have to continue running will be considerably lower.

The financial situation under the Plan is that, against the average annual investment of Rs. 80 crores, the first year's expenditure fell short by Rs. 10 crores, and the second year's by Rs. 20 crores, due mainly to the tardy receipt of rolling stock and to short supplies of steel, cement and other materials holding up works. The third year's figure, however, approximates to the allotment and it is expected that the fourth and fifth years will be running at about Rs. 95 crores, or Rs. 15 crores in excess of the average allotment. If the present rate of supply of rolling stock and track materials is maintained, it is estimated that the full allotment of Rs. 400 crores will be absorbed, and that a sound foundation will be available for development under the second Five Year Plan.

## RAILWAY REGROUPING

The history of our railways over their century old existence shows that their development was haphazard and often without any regard to the principle of maximum efficiency and minimum costs. They developed without any conscious design or pattern, resulting in diversity of practice, differences in the levels of efficiency in working and standard of service. This could be realised from the fact that as late as 1948, there were in India 42 railway systems consisting of 13 Class I Railways, 10 class II Railways and 19 Class III Railways. These included 32 lines owned by the former Indian States varying from 5 miles of the Sangli State to 1,396 miles of the Nizam's State. These railways of the Princely States had a total route mileage of 7,559.

The idea of regrouping our whole railway system into well integrated larger and viable units was conceived from the beginning of this century and the principle was accepted by the various Railway Committees. However, there were various difficulties in the way of regrouping. In 1944 all the remaining company-managed railways were taken over by the State. This removed a major difficulty. The Partition of the country affected the North Western and the Bengal Assam Railways very badly. They were left, as we have seen earlier, without adequate workshop and maintenance facilities. The Indian parts of these railways were temporarily incorporated in the Eastern Punjab Railway in the west and the Assam Railway in Assam. With the integration of the Indian Princely States, all the railways in these territories came under the control of the Government. With this background, therefore, time was opportune for bringing about a comprehensive regrouping of the railway systems.

In 1950 a plan of regrouping was prepared by the Railway Board. It was proposed to regroup the Indian railways in six zonal systems, *viz.,* (1) Northern, (2) North Eastern, (3) Eastern, (4) Southern, (5) Central and (6) Western. The underlying principles of the plan were "to amalgamate the smaller independent lines in contiguous areas into self-sufficient systems in a compact region having economic unity and natural affinities of trade and flow of traffic, and in implementing it, to so phase the integration that there should be minimum dislocation in working, and no loss of operational efficiency."

The Southern Zone, consisting of the M.S.M., the S.I. and the Mysore Railways, was formed on 14th April 1951. The Central and Western Railways were formed on 5th November 1951. The former G.I.P., the Nizam's State, the Scindia and the Dholpur Railways were amalgamated to form the Central Railway. The Western Railway was formed by the merger of the former B.B. & C.I., the Saurashtra, the Rajasthan and the Jaipur Railways.

The final phase of the railway regrouping was completed by the formation on 14th April 1952 of the Northern, the North Eastern and the Eastern Railways. The former East Punjab, the Jodhpur, the Bikaner Railways and the three upper divisions of the E.I.Railway were merged together to form the Northern Railway. The North Eastern Railway was formed by the fusion of the Oudh and Tirhut and the Assam Railways. The Eastern Railway was constituted by merging the remaining divisions of the E. I. Railway with the Bengal Nagpur Railway.

## BENEFITS OF REGROUPING

We reproduce here some extracts of the speech of the late Shri Gopalaswami Ayyangar on the occasion of the inauguration of the Central and Western Railways. These extracts aptly summarise the benefits expected from the railway regrouping.

'The present disparities in the standards of the smaller individual railways and their methods of working militate against rendering to the public as good a transportation service as they have a right to expect. Their consolidation ......will set forces at work which will, in due course, bring about improved standards and uniformity and up-to-datedness in methods of operation all round. The larger resources of each of the combined systems will enable local requirements to be met more satisfactorily and expeditiously. The effect of the regrouping on integral administration and operation will itself be of no small importance. The strength of a chain is determined by its weakest link. The disappearance of the smaller lines will remove the weak links of the present transport system. The reorganization of administration, the tightening up of control, the application of the increased resources of the enlarged system to the maximum advantage, the elimination of duplication and waste, the economies in the procurement, utilization and stocking of equipment and materials—all these, to mention only a few items, should help to reduce the overall cost of transportation both to the nation and to the individual. When it is realised that daily we in India carry only one-fifth of a ton mile per head of the population which is only one-sixth of the corresponding figures for great Britain and as low as one-fiftieth of that for the United States, it will be appreciated how backward we are.'

'The Government stand committed to an economic programme of the immediate revitalization of agriculture, rapid industrialization and the achievement of a reasonable standard of life by every man, woman and child. No such programme can be put through without an adequate recognition of its demands on rail transport. It necessarily would require an unprecedented increase in the freight tonnage to be handled by railways, a pronounced acceleration of the speed and frequency of services and railway operation in general, at a high level of efficiency. Passenger traffic, both suburban and general, has been steadily growing and is bound to grow further still. It is my confident hope that the...new railways...will, in their organization, equipment and functioning adequately bear the increasing strains and stresses of expanding transportation in the areas they serve.'

## The Railway Conventions

We have reviewed earlier the recommendations of the Acworth Committee relating to separation of the railway budget from the general budget. These recommendations were incorporated in the Railway Convention of 1924, which separated the railway finances from the general finances and sought to ensure flexibility in the financial administration of railways as a commercial undertaking and to afford to them a measure of freedom to pursue a policy of expansion and development.

The actual working of the railways through a quarter of a century showed that the objectives of the Convention were not realised. The uncertainty which was present in the general finances before the Convention, continued even thereafter. The contribution of the railways to the general revenues was an indeterminate amount, which consequently failed to assist in forward planning or in the framing of accurate civil estimates. This also denied the railways an opportunity to build up adequate reserves to ensure minimum returns to the general revenues in the years of depression. In the thirties the Reserve Fund was depleted and serious inroads were made even into the accumulations of the Depreciation Fund.

## THE CONVENTION OF 1943

In the light of this experience the Legislative Assembly passed a new Convention Resolution on 2nd March 1943. The Resolution said that the Convention of 1924 did not achieve objectives of relieving the General Budget from violent fluctuations caused by the incorporation therein of the railway estimates and enabling the railways to carry on a continuous railway policy based on the necessity of making a definite return to general revenues. The Resolution recommended to the Governor General that :

(*i*) for the year 1942-43 a sum of Rs. 2,35,32,000 shall be paid to general revenues over and above the current and arrear contribution,

(*ii*) from the 1st April 1943, so much of the Convention as provides for the contribution and allocation of surpluses to general revenues shall cease to be in force,

(*iii*) for the year 1943-44 the surplus on commercial lines shall be utilised to repay any outstanding loan from the depreciation fund and thereafter be divided 25 per cent to the railway reserve and 75 per cent to general revenues, the loss, if any, on strategic lines being recovered from General Revenues, and

(*iv*) for subsequent years and until a new Convention is adopted by the Assembly,the allocation of the surplus on commercial lines between the railway reserve and general revenues shall be decided each year on consideration of the needs of the railways and general revenues, the loss, if any, on strategic lines being recovered from general revenues.

## THE CONVENTION OF 1949

With the achievement of independence, a Committee was appointed in April 1949 to review the Convention relating the separation of the railway from general finances. On the 21st December 1949, the Constituent Assembly passed a new Convention Resolution, which came into force on the 1st April 1950.

The Resolution contained the following recommendations :—

1. That railway finance shall continue to remain separated from general finance;
2. that the general taxpayer shall have the status of the sole shareholder in the railway undertaking;
3. that on the capital invested out of general revenues in the railway undertaking as computed annually, general revenues shall receive only a fixed annual dividend;
4. that for a period of five years, commencing from 1950-51, the annual dividend, shall be a sum calculated at the rate of 4 per cent on the capital invested provided that no dividend shall be payable on the capital invested out of general revenues in unremunerative strategic lines;
5. that a Committee of the House shall review the rate of dividend towards the end of the aforesaid period and suggest for the years following it any adjustment considered necessary,having regard to the revenue returns of the railway undertaking, the average borrowing rate of government and any other relevant factors;
6. That the existing railway reserve shall be named the Revenue Reserve Fund and utilised primarily for maintaining the agreed payments to general revenues and for making up any deficit in the working of the railways;

7. that a Development Fund shall be constituted for financing expenditure for the following purposes :—
   (*a*) passenger amenities,
   (*b*) labour welfare, and
   (*c*) railway projects which are necessary but unremunerative;
8. that for meeting the cost of replacement and renewal of assets, the Depreciation Reserve Fund shall receive, for the next five years, a minimum contribution of Rs. 15 crores per annum chargeable to the working expenses of the undertaking;
9. that the railway surplus shall be available for distribution amongst the Revenue Reserve Fund, the Development Fund, and the Depreciation Reserve Fund to the extent the last-named needs strengthening over and above the minimum annual contribution;
10. that a Standing Finance Committee for railways and a Central Advisory Council for railways shall be constituted;
11. that the annual estimates of railway expenditure shall be placed before the Standing Finance Committee for Railways on some date prior to the date for the discussion of the demands for grants for railways by the Assembly, and
12. that the Railway Budget shall be presented to the House, if possible, in advance of the general budget and separate days shall be allotted for its discussion and the Minister for Railways shall then make a general statement on railway accounts and working. The expenditure proposed in Railway Budget, including the appropriation to the Depreciation Fund, the Development Fund shall be placed before grants. The form the budget shall take, the details it shall give, and the

> number of grants into which the total vote shall be divided, shall be drawn up by the Ministry of Railways in consultation with the Standing Finance Committee for Railways.

## REORGANIZATION OF THE RAILWAY BOARD

We have noted earlier the recommendations of the Acworth Committee relating to the structure and status of the Railway Board. Following those recommendations a Chief Commissioner, with the status of a Secretary to the Government and with the right of direct access to the Viceroy was appointed as the sole technical adviser to the Government, assisted by two functional members. At the same time a new post of Financial Commissioner was created. He had the full financial authority of the Government. In financial matters the Financial Commissioner was the supreme-authority and could not be overruled. He was given the right of direct access to the Finance Member, who was kept informed of the developments through the former. The Commissioner was made responsible for the co-ordination of railway policy with the general economic policy of the Government.

With the achievement of independence and the adoption of the Constitution a further reorganisation of the Railway Board became imperative. It was felt that the need for an officer of the Board, who was not burdened with departmental responsibilities, was not now compelling. A change was effected in 1951 and an attempt was made to ensure overall co-ordination first at the Board and then at the Ministrial level. The post of the Chief Commissioner of Railways was abolished. It was also decided that one of the functional members should act as the Chairman and also be an-ex-officio Secretary to the Ministry. The post of the Financial Commissioner was retained and in financial matters he was given the ex-officio status of the Secretary to the Ministry.

Recently the Railway Board was reconstituted with effect from the 1st October 1954. The Board will now have five instead of four members, *i.e.*, the Chairman and four other members, including the Financial Commissioner. The General Manager of the Ganga Bridge Project, Mr. G. Pande is appointed the new Chairman. The three members will be Mr. P. C. Mukerjee, Mr. K.P. Mushran and Mr. K. B. Mathur, General Managers of the Eastern, Western and Northern Railways, respectively.

It is expected that this reorganisation will assist better control of the financial working of the railways and improve railway development. It is officially stated that the number of members is increased in order to ensure scientific planning and to expedite the implementation of large schemes which the railways have been called upon to undertake in the coming years. It is expected that with these changes the Railway Board will be enabled to function even better than it has done so far, to keep in touch with the trends of economic development in the country and to assess the needs and requirements of transport in different regions. The Board will now be able to plan the development of railways with imagination and a wider perspective.

# SHIPPING AND SHIPBUILDING IN INDIA

*"Indian Shipping had to perish so that British Shipping might flourish".*

–MAHATMA GANDHI

*"For many years past I have watched with interest the struggle of national shipping against powerful foreign shipping companies aided by the British Government. I have no doubt that if India had been a free country and in a position to control her own destinies, we would have developed long ago a national mercantile marine worthy of our country whose ships would have ploughed the oceans of the world and been welcoming visitors to its ports. .........I am impatient to see Indian ships carrying the flag of India across the distant seas to far away countries".*

PANDIT NEHRU

## THE GLORY THAT WAS INDIA[1]

India can be proud of a glorious past in shipping and shipbuilding. History records that for centuries India was a sea-faring nation and her ships and people have been known to have colonised and cultured as distant lands as Philippines. In the days of Alexander the Great, the stupendous fleet of India impressed Nearchus, Alexander's general. In the days of Akbar the Great, it is on record in the *Ain-e-Akbari* that there were 40,000 vessels engaged on the Indus alone. High tributes were paid to Indian shipbuilding by Marco Polo. The great seafarer Vasco da Gama was surprised to find that Indians possessed even superior navigational instruments than those he had. Cessare Di Fedorici, a Venetian traveller, has recorded (1565) that the abundance of shipbuilding materials and the shipbuilding skill in India enabled the Sultan of Turkey to have his ships built in distant Dacca than in Alexandria.

---

[1] For more details see Indian Shipping by Asoka Mehta.

Even as late as Napoleonic Wars, Codrington, a British admiral preferred an Indian built ship to be his flagship. C.R. Low in his 'History of the Indian Navy' records the glorious story of *Salsette*, constructed by Jamshedji Bomanji, a shipbuilder of Bombay. Even in the days of the East India Company, some of the well-known frigates of the Company were built by the famous Wadias of Bombay. The story of the famous Maratha admiral, Kanhojee Angrey and his gallant fight with the East India Company's marine (1714-1749) is too well known to be retold. He had a fleet of nearly 10,000 tons in those days.

## WADIA, A FAMILY OF SHIPBUILDERS

A mention must be made of the famous Wadia (*Wahandiya*) family here. Shipbuilding was started in 1735 under Government patronage. Lowji Nusserwanji Wadia from Surat was appointed the first Master Builder of the Bombay Dockyard. He built several ships for the Company. His sons Maneckji and Bomanji carried on his work after his death in 1774. In 1790-92 these were succeeded by Framji and Jamshedji. The latter was a shipbuilding genius and he made Bombay ships the envy of the world. During 1810-1821 the British Admiralty placed orders for several of their ships to be built in Bombay. After the death of Jamshedji in 1821, his son Nowroji succeeded him and maintained the reputation of the family.

In this connection, C.R. Low writes, "The steamers and sailing ships constructed at Bombay were the most serviceable of any in the possession of the Company.........while the steamships built or purchased in England were generally a signal failure". Jehangir, son of Nowroji Wadia went to England in 1838 to acquaint himself with the new methods of building iron ships. In the previous year, the Kidderpore Dockyard at Calcutta was organised by Dhanjibhai Wadia. The Wadia family occupied the position of Master Builder for over 150 years, in which they built 345 ships. Jamshedji Dhanjibhai was the last Master Builder from this family.

## THE DOWNFALL OF INDIAN SHIPPING

The transfer of the Government of India from the Company to the Crown marked the decline of Indian shipping and shipbuilding. The Indian Navy was abolished. With the change-over from wood to iron, India lost all her differential advantage in shipbuilding materials. The adjustment necessary in this change would have been easily achieved if the Government had given adequate and proper encouragement to this great industry. The Indians could not keep pace with the rapid improvement in naval architecture and the requirements of mechanised transport. Besides these causes, the jealousy of the British shipping interests and the application of the British Navigation Acts to India were the other causes, which brought to a shameful close the glorious chapter of Indian Shipping.

## MODERN SHIPPING IN INDIA

This deliberate neglect by an alien rule resulted in a break in the continuity of shipping and shipbuilding progress, and a start from the scratch had to be made. The Indian shipping interests had to give a heroic fight in which the combatants were unequally matched. The combined forces of the British and foreign shipping interests and the Government of India were too strong for the puny and infant shipping enterprise in the country.

## SCINDIA STEAM NAVIGATION COMPANY LTD.

On 27th March, 1919 the Scindia Steam Navigation Co. Ltd. was registered with a capital of Rs. 4 crores, and the foundation of modern shipping was thus laid. The four pillars of this great venture were Mr. Narottam Morarjee, Mr. Walchand Hirachand, Mr. Lallubhai Samaldas and Mr. Kilachand Devchand. Earlier more than a hundred shipping companies were started in India. These included the ventures of patriots like Mr. Jamshedji Tata and Mr. Chidambaran Pillai. But these could not survive against relentless competition from the heavy combination of British and foreign interests. Scindias was the only company of some importance which survived this terrible ordeal. This Company represents today the major portion of Indian shipping.

In 1921 the Scindias started operating cargo services in the home waters. For this purpose the Company purchased the entire share capital of a Liverpool concern, which owned six cargo ships. The concern had to be purchased on account of certain difficulties in the transfer of British ships to Indian registry. The coastal trade at the time included trade with Burma and Pakistan. The Company also wished to participate in the trade with Ceylon.

### Hostility Of British Shipping Interests

Scindias' participation in the coastal trade, in which the foreign interests were firmly entrenched, aroused the hostility of the latter. The British Companies began a cut-throat competition to oust the new intruder. They tried all methods, fair and unfair, to drive the Indian Companies to the wall. Thanks to the patriotism of Indian businessmen led by Seth Mooljee Dharsey and Sir Abdul Karim Jamal, who offered rice cargoes to the Scindias, which enabled the latter to withstand the worst attacks of British and foreign competition.

### Rate War And Deferred Rebate

The foreign companies started now a fierce rate war and freight rates on rice cargoes from Rangoon to Bombay were reduced from Rs. 18/- to the uneconomic level of Rs.

6/- per ton. They also applied the deferred rebate system in order to force Indian shippers to continue their patronage to the British Companies.

Mr. S. N. Haji, in his 'Economics of Shipping', has explained the deferred rebate system as follows :—

"The shipping companies issue a notice or circular to shippers informing them that, if at the end of a certain period (usually four or six months) they have not shipped goods by any vessels other than those dispatched by members of the Conference, they will be credited with a sum equivalent to a certain part (usually ten per cent) of the aggregate freights paid on their shipments during that period, and that this sum will be paid over to them, if at the end of a further period (usually four or six months) they have continued to confine their shipments to vessels belonging to members of the Conference. The sum so paid is known as deferred rebate."

The deferred rebate system was a powerful weapon employed for throttling the indigenous enterprise. The Scindia Company, however, was dauntless and it surprised its competitors by even securing huge sugar cargoes from Java destined for the Kathiawar ports.

The resources of the Scindia Company had been almost exhausted. It had lost nearly Rs. 20 lakhs in the freight war. In 1923 Sir Lallubhai Samaldas met Lord Inchcape when the latter had come to India as the Chairman of the Inchcape Committee. Inchcape's name will be remembered with hatred in the history of Indian shipping. Lord Inchcape (formerly Sir James Lyall Mackay) had a colourful career in which he had brought scores of Indian shipping companies to ruin. At this time he was the head of the P. & O. and B.I.S.N. groups. He offered Sir Lallubhai Samaldas to buy up the Scindia Steam Navigation Co. Ltd. at a handsome price. Thanks to the patriotism of the Indian Shipping magnates, this offer was rejected with the scorn it merited.

Subsequently, Lord Inchcape opened up negotiations with the Scindia Company for an amicable settlement of the rate war. The latter had lost about half of its capital due to the losses suffered in this war. Scindias signed a ten-year agreement with the British shipping interests. The Scindia Company was admitted to the Coastal Conference. It agreed to restrict its tonnage to an aggregate of 75,000 gross tons and also agreed to confine its activities to coastal waters. This was like signing a slavery bond but it was nevertheless a better alternative than to have perished. The whole business made at least one thing clear, that is, that Indians could not now be annihilated from the shipping industry. The Scindia Company began to develop gradually its services to Colombo, Malabar and Kathiawar ports and Karachi.

## THE INDIAN MERCANTILE MARINE COMMITTEE, 1923

The success of the Scindia Company in withstanding concerted foreign attacks aroused a keen public interest in the development of our own mercantile marine. For some time this Company was the centre of a great controversy in the country. It had fought a great battle and deserved the country's congratulations.

On 12th January 1922, the Legislative Assembly adopted a Resolution moved by Sir P. S. Sivaswamy Iyer. Pursuant to that Resolution the Government of India, on 3rd February 1923, appointed the Indian Mercantile Marine Committee, with Mr. Headlam, the Director of the Royal Indian Marine, as the Chairman. The other members were the Consulting Naval Architect to the India Office, a representative of the British shipping interests, two representatives of Indian Shipping interest and a member of the Legislative Assembly. The Committee were to consider and report on the measures that were necessary for the promotion of the Indian shipping and shipbuilding industries. The Committee submitted its Report in March 1924. Except for the dissenting minute of Sir Arthur Froom, the representative of the British interests, the Committee's Report was unanimous.

The following are the chief recommendations of the Committee :—

1. The establishment of a training ship at Bombay by the Government for providing training of men for becoming future officers of the mercantile marine.

2. The Engineering Colleges should provide for marine engineering courses.

3. The coastal trade should be reserved for licensed shipping companies, which should be eventually Indianized as to ownership and controlling interest, in a period of about 25 years.

4. The Government should actively consider the question of giving bounties to purely Indian shipping companies, engaged in overseas trade to other countries.

5. Calcutta should be developed as a shipbuilding centre. The Committee also recommended that the Government should give construction bounty to ships built in India.

6. The Government should aid the establishment of a shipbuilding yard by an Indian Company. This aid may take the form; firstly, of cheap loans; secondly, of assistance in acquiring a site for the yard; thirdly, of extension of Government and Port Trust patronage; lastly, making it statutorily compulsory, in due course when the yard was eatablished, that all ship seeking licence on the coast should have been built there.

7. Expert foreign assistance should be invited for helping in the establishment of the shipbuilding yard.

## THE REPORT SHELVED

The recommendations of the Report, if implemented would have brought far-reaching changes in Indian shipping. It was clear that the Government were not anxious to implement it. They studied the Report for two years and in 1926, Sir Charles Innes, the then Commerce Member found all wisdom of the Report in the dissenting minute of Sir Arthur Froom. He thought that the Committee's scheme for Indianization of our coastal marine savoured of expropriation and flag discrimination. His disposal of the Committee's other recommendations were as amusing, and left no doubt in anybody's mind that the Government spoke not for the country they ruled, but for Leadenhall Street, whose interests were next to their heart.

## TRAINING SHIP

As late as 1927 the I.M.M.T.S. Dufferin was established in the Government Dockyard, Bombay for training cadets for the mercantile marine. The mere establishment of a training ship, however, was not going to Indianize our mercantile marine. In this connection, Mr. Narottam Morarjee said, "unless the Government of India make it obligatory by statute, as recommended by the Mercantile Marine Committee in their Report, on the ships plying on the coast to recruit at least 50 per cent of their officers from those who obtain the necessary certificate of competency after undergoing training on the Training Ship, I feel certain that the proposed Training Ship will defeat its own object". This proved very true. The Dufferin Cadets could not get employment after finishing their training. The foreign companies were reluctant to employ them.

In 1936, the then Commerce Member Sir Muhammad Zafrullah Khan admitted that a large number of ex-Dufferin cadets had not found employment and that it might have discouraged youngsters from taking up that career. Instead of taking any positive action in correcting this situation the Government chose the negative method, and altered suitably the Prospectus of the Dufferin. By this alteration the Government had found a legal method of absolving themselves of the responsibility of providing employment to the trained cadets.

## HAJI'S COASTAL RESERVATION BILL, 1928

As the Government quietly shelved the Report of the Indian Mercantile Marine Committee, Mr. S. N. Haji introduced his famous Bill for the Reservation of Coastal Trade for Indian Shipping, in the September session of the Legislative Assembly in 1928. The Government had anticipated this move and therefore, they challenged its validity. However, the Law Officers of the Crown declared it *intra vires* of the Assembly.

The Bill sought to transfer in five years the controlling interest to Indians in the coastal marine. It provided for 75 per cent of the stock to be vested in Indian nationals. It also provided that 75 per cent of the management control, including the Chairman of the Board of Directors, and also 75 per cent of the voting powers should be Indian. All vessels engaged in the coastal trade had to obtain licences from the Governor-General-in-Council.

The case for reservation of coastal traffic to national shipping is so obvious that it hardly needs any elucidation. We have reviewed the shipping developments in other countries of the world. Almost all countries in the world aspiring to develop their own mercantile marine have adopted this principle of reserving the coastal traffic to national shipping.

In 1927, on the occasion of the launching of Scindias' s. s. Jalabala at Glasgow, the late Mr. Vithalbhai Patel asked:

"Whilst the Governments of almost all maritime countries have helped and are helping their nationals to build up their own mercantile marine, are not Indians entitled to expect their Government to help them in this great industry ?"

Our country has the best position and resources characteristic of a maritime nation. In these respects she compares very favourably with other great maritime nations like the U.K., U.S.A., Japan, Germany and France. But as regards participation of national shipping in her own coastal trade she compares very poorly. The U.S.A. reserves 100 per cent of her coastal traffic for American ships, Japan also 100 per cent, the U.K. 99 per cent, but at the end of the second World War Indian ships participated only to the extent of 23 per cent in India's own waters, whereas foreign shipping companies accounted for the rest !

Mr. Haji's bill caused a Homeric battle to be waged between the Government and the British shipping interests on one side and the Indian nationalists on the other. Great Indians like Pandit Motilal Nehru and Lala Lajpat Rai led the nationalist side to demolish the Government's case, which was without any substance.

While there is no gainsaying that the Government were deadly set against the passage of the Bill, we give here some arguments of the Government, not because they were weighty but because of their ludicrousness. The Government spokesman argued on the lines of previous contentions of Sir Charles Innes in 1926. He said, "This Bill, if passed, will have an unfavourable reaction upon the position of Indians in the British Colonies, where they are fighting for equality of status". The Government's point of view was summarised by Sir George Rainey—"We urge that the proposition is economically unsound and is not in the interests of India. We urge that it is likely to be ineffective owing to the existence of a number of non-British ports on the coast of India. We urge that it is unjust to Burma. And finally—and this with me is the most vital argument—the Bill is open in principle as involving both expropriation and racial discrimination, and we apprehend that the latter feature will have most unfortunate repercussions in South Africa and other British Dominions".

On 28th September, 1928 the principle underlying the Bill was accepted by the Assembly by 71 votes to 46. The Bill was referred to a Select Committee, whose report thereon was due in September 1929.

## JOINT SHIPPING CONFERENCE

Meanwhile with a view to forestalling the passage of Mr. Haji's Bill, which the Government did not wish to be enacted, Lord Irwin, the Governor-General convened a Joint Shipping Conference of Indian and non-Indian shipping companies. The aim of convening such a Conference was to evolve an agreed formula for the participation of Indian shipping companies in the coastal and overseas trade of India.

This Conference failed on account of the non-co-operation of the British Shipping Companies. The Government announced, "...........As soon as it has been possible fully to consider these issues, the responsibility will rest with the Government of India of deciding what action should now be taken and whether any useful purpose would be served by inviting the interests concerned to meet again".

It appears that the Government were still engaged in fully considering the issue when the independence came ! Meanwhile, the British shipping interests continued their old game to oust Indian companies out of India's own waters. Coastal freight rates were reduced to uneconomic levels, while rates in other trades, where they enjoyed monopolistic advantages, were kept at high levels.

That was the end of Mr. Haji's Bill. Even that Bill Mahatmaji regarded as a very moderate effort. He wrote—"Shrijut Haji might justly have gone further than he has"

## DURING DEPRESSION

During the depression Indian shipping companies experienced the worst effects of a rate war. Mahatmaji called it a struggle between the giant and the dwarf. The British shipping interests cut freight rates to an uneconomic level. Various other devices were employed to ensure the 'loyalty' of the Indian shippers by the British shipping companies. These devices amounted, in effect, to a concealed rate war.

Matters were made worse for Indian shipping by the general economic depression, the political struggle at home, the collapse of the rice market, strike among the stevedore labour in Rangoon and riots in Burma. The Rice Merchants' Association, however, took a patriotic decision of confining their shippings to Indian companies only.

During 1932-33 the Coastal Conference wanted Scindias to join them in fighting other Indian companies plying the West Coast and also Bengal Burma trades. The Scindias refused to do anything of this sort and on the contrary helped other Indian companies in their difficult times.

In 1933 the ten-year agreement between the B.I.S.N., the Asiatic and the Scindia Companies was due to expire. The signing of a new agreement on 1st April 1933 was preceded by a severe rate war, in which the Scindia Company was badly mauled. The new Tripartite Conference put the Sindias under severe limitations regarding trading rights and the aggregate tonnage to be employed. The Scindia Company had to accept these humiliating restrictions as the Government of the day was unsympathetic, if not openly hostile towards Indian shipping companies. The Tripartite Conference lasted till 1950. Soon the Scindia Company as a member of the Conference inaugurated passenger service to the Coromandel Coast and to Rangoon. Earlier the Scindias had started a subsidiary company called the Scindia Steamships (Burma) Ltd. to meet the trading conditions in Burma.

At about this time (1933-34) four Indian companies, *viz.*, the Merchant Steam Navigation Company, the Malabar Steamship Company, the National Steamship Company and the Eastern Steam Navigation Co. Ltd. were subjected to a very bad form of competition by British and foreign shipping companies trading on the Malabar Coast. The Scindias protested and Mr. Walchand Hirachand prevailed upon the Commerce Member to call a shipping conference for examining the relative rights of the small and big companies.

## THE BHORE AWARD

Under the pressure of public opinion, Sir Joseph Bhore, the then Commerce Member, convened a Conference of Shipping Companies operating in India. The Conference was a failure and the meeting left the decision in the dispute to Sir Joseph. The decision he gave is known as the Bhore Award, by which 85 per cent of certain trades on the West Coast were allocated to Indian shipping companies, as were not members of the Tripartite Conference. This, however, meant that the Scindia Company had to give up voluntarily a substantial portion of its own income for championing the cause of smaller Indian companies.

## RATE WAR IN HAJ PILGRIMAGE

Thousands of Indian pilgrims visit every year the holy places in Saudi Arabia. The British shipping interests were already entrenched in this lucrative trade. The Scindia Company put three specially equipped ships on this run. The British Companies put down the fare from Rs. 172 to Rs. 120 only, which included messing charges, as also the pilgrim dues of Rs. 20 per person payable at Jeddah. Thus the British Companies paid out of their own pockets to drive the new intruder to the wall. Sardar Patel advised the Scindia Company not to withdraw from this service. The Government had to intervene and fixed the fare at a low figure of Rs. 100 in 1938.

## KONKAN RATE WAR

At about this time another rate war started in the Konkan trade and was carried to a ridiculous extent. The British managed, Bombay Steam Navigation Company sought to kill the business of the Indian Co-operative Navigation Trading Co., Ltd., an Indian company trading on this line since 1909. Scindias had to come to the help of the latter.

Similarly, the Ratnagar Steam Navigation Company was also in difficulties due to the rate war. The Scindia Company, in order to strengthen the hands of these two companies, acquired capital interest in the Ratnagar Company.

On the eve of the second World War the Scindia Company made a bold bid which surprised the British shipping interests. The major portion of the capital of the British managed Bombay Steam Navigation Company was in Indian hands. The Scindia Company proposed the Indianization of its management. And it carried through the scheme despite the furore that was raised in British commercial circles.

## ABOLITION OF THE DEFERRED REBATE SYSTEM

In this connection, we should mention another unsuccessful attempt made by Mr. S.N. Haji to introduce another Bill (1929) seeking to abolish the deferred rebate system. This Bill was complementary to his Coastal Reservation Bill, which had sought to retain shipping earnings in India. The 1929 Bill provided for ensuring a fair distribution of business among shipping companies, once the coastal trade was reserved for Indian ships. The then Commerce Member, Sir George Rainy opined that the Bill would not stop the rate war and he stoutly defended the deferred rebate system as having singular benefits, such as, ensuring a regular service, stability of freights and equality between large and small shippers. The Bill had to wait till a decision had been taken on the Coastal Reservation Bill, the fate of which we have already related.

## WAR AND AFTER

On the eve of the second World War the Indian fleet had 53 ships with a total tonnage of 1,26,709 G.R.T., owned by 9 shipping companies. It was admitted even by the alien Government of India in 1944 that India's merchant navy was "distressingly small". However, even this fleet did its best to help the Allies in the war effort. During the war 14 ships with a tonnage of 34,506 G.R.T. were lost in action. Three ships with a tonnage of 6,083 were added to the fleet. The Indian shipping fleet, therefore, consisted in the beginning of 1946 of 42 vessels with an aggregate tonnage of 98,286 G.R.T. owned by 11 companies.

### INDIAN SHIPPING TONNAGE

| Year | | No. of companies | No. of ships | Tonnage |
|---|---|---|---|---|
| 1939 | ... | 9 | 53 | 126,709 |
| 1946 | ... | 11 | 42 | 98,286 |
| 1947 | ... | 14 | 60 | 189,226 |
| 1948 | ... | 15 | 72 | 249,261 |
| 1949 | ... | 20 | 84 | 332,490 |
| 1950 | ... | 23 | 90 | 364,632 |
| 1951 | ... | 23 | 92 | 366,646 |
| 1952 | ... | 26 | 100 | 383,911 |
| 1953 | ... | 25 | 111 | 422,734 |

### RECONSTRUCTION POLICY SUB-COMMITTEE ON SHIPPING, 1945

In November 1945, the Government of India appointed the above Committee with Sir C. P. Ramaswamy Aiyar as Chairman. The other members were Mr. K. C. Neogy, Mr. M. A. Master, Sir A. H. Ghuznavi and Mr. W.L.A. Radcliffe. Its Report was made public on 2nd April 1947.

The Committee's recommendations were as follows :—

1. Complete Indianization of the coastal traffic which should be reserved for Indian ships.

2. Seventy-five per cent of India's trade with neighbouring countries like Burma and Ceylon should be secured for Indian ships.

3. Fifty per cent of India's trade with geographically adjacent countries, as well as distant countries should be secured for Indian ships.

4. Similarly, 30 per cent of the trade carried in Axis vessels in the East should be secured for home ships.

The Committee designated a period of five to seven years to accomplish these developments.

5. An Indian shipping company was to be by definition, one which was registered at a port or ports in India, at least 75 per cent of whose shares were held by Indians in their own right, and whose entire directorate and managing agents, if any, were Indians.

The Committee set the target of tonnage at 2 million tons to be reached in a period of about seven years. The Committee also recommended that a Shipping Board should be established to implement the shipping policy of the Government.

The Government accepted the recommendations of the Committee. They sent a deputation of the Indian shipowners, led by the late Seth Walchand Hirachand, in July 1947, for a Conference with British shipping interests. The Conference ended in a failure and for the time being the question of Indian participation in overseas trades, by amicable negotiations with foreign shipping interests, was set aside.

### OVERSEAS SERVICE

In 1947, the Scindia Steam Navigation Co. Ltd. opened an India-U.S. cargo service, for which purpose the Government helped the Company in purchasing five Liberty ships. The Company also started an India-U.K.-Continent cargo service and was admitted as a member of the 'Karmahom' Shipping Conference. Later the Scindia Company also began an India-U.K. passenger service.

## SHIPPING CONFERENCE OF 1947 AND THE SHIPPING POLICY OF THE GOVERNMENT

In November 1947 a Conference was held under the presidentship of the then Commerce Minister, Mr. C. H. Bhabha. He informed the Conference that the Government had decided to tackle the two main defects in Indian shipping, *viz.*, the shortage of tonnage and the shortage of personnel. He said that the Government were anxious to ensure the rapid expansion of Indian owned tonnage in order to develop Indian mercantile marine on sound, healthy and nationally accepted lines. He, however, observed that very few of the shipping companies in the country had the resources to buy a sufficiently large number of these ships, and it was increasingly borne in upon the Government that, if at the present stage of the development of shipping companies in the country Government had to rely on private enterprise, the growth and development of our mercantile marine would be disappointingly slow. He said that the new shipping policy of the Government must be broad based on the active co-operation of the State with enlightened private enterprise in an endeavour to secure for India her rightful place among the maritime nations of the world.

This announcement of the Government's shipping policy created new hopes and inaugurated a new era of the revival of our shipping. Following the announcement of this new policy of 'Joint Economy' (partnership of State and private enterprise) there was a visible progress in tonnage and capital.

Mr. M. A. Master writes, in this context, "While private enterprise...........rose equal to the occasion and played its part in the development of Indian tonnage far beyond the expectations of the Government it is unfortunate for the country that the Government lacked both the drive and the foresight to implement their policy of 'Joint Economy' for building up a merchant navy for the country as announced by them in 1947. The amount invested in shipping tonnage by private enterprise was less than Rs. 3 crores in 1945. It has now (1953) exceeded Rs. 25 crores. With all their resources and with all their assurances, the Government have, however, been able to establish only one Shipping Corporation up to now.........The Shipping Corporation has been able to acquire only two ships up to now. The Government hold today 74 per cent of the capital in the Corporation. The amount invested by the Corporation in shipping tonnage does not exceed today the sum of Rs. 45 lakhs".

## GOVERNMENT PARTICIPATION IN SHIPPING

In March 1950 the Eastern Shipping Corporation Ltd. was founded for expansion of Indian shipping in the Australian and Far Eastern trades. The Government have provided the major portion of the capital but the Scindia Company has been given the major share of its management. The affairs of the Corporation are in the hands of a mixed Board of Directors in which the Government representatives are in a majority. Two 10,000 tonner ships, s. s. Bombay and s. s. West Bengal ply over the India-Australia route. Another ship, s. s. Jalagopal has been chartered from the Scindia Company to run the Madras-Singapore service. As we have seen above this experiment has added only about 15,000 G.R.T. to Indian shipping. Recently, however, Mr. Lal Bahadur Sastri has announced the intention of the Government to take active measures for a rapid expansion.

## RESERVATION OF COASTAL TRADE

After a long struggle extending over three decades, the decision was taken by the Government to reserve the coastal trade for Indian ships. Under powers given by the Control of Shipping Act, 1947, as amended by Amendment Acts of 1948 and 1950, the Government announced that with effect from 15th August 1950 steps would be taken to reserve at the earliest practicable date for Indian owned ships the whole of the Indian coastal trade. At present about 93 per cent of the coastal trade is served by Indian shipping, and non-Indian ships continue to participate under licence in the coastal trade.

### INDIAN COASTAL CONFERENCE

Recently (1950-51) the Scindia Steam Navigation Co. Ltd. terminated the Tripartite Conference with the B.I.S.N. and the Asiatic Steam Navigation Companies. In January 1951 an Indian Coastal Conference, purely Indian in composition, was found. The Indian shipping companies serving the coast are its members.

### RESERVATION OF COASTAL TRADE AND REFINERY PRODUCTS

After reserving the coastal trade to Indian shipping, the Government in 1951 gave an assurance to the Oil Companies (whose refineries have been established in Bombay) that they would be allowed to carry from Bombay, the refined products of their refineries in their own tankers regardless of Flag, for delivery at other ports on the coast of India.

We must note here that India does not possess large passenger liners and only one single tanker. Huge amounts of crude oil (approximately 4 million tons per year) will be brought to India from foreign countries, and 6 to 9 lakhs tons of refined products will be carried from these three refineries to coastal ports of India. It is urged that the assurance of the Government to the Oil Companies is tantamount to a breach of policy enunciated by the Government. It is argued that even if the Eastern Shipping Corporation or any other Indian shipping company acquires in future oil tankers, it will not be able to carry oil products to and from the refineries, on account of the assurance given to the Oil Companies by the Government. Under the agreement the only obligation which the Oil Companies have accepted at present is to enter into discussion with the Government with a view to utilisation of a reasonable number of such tankers (*i.e.* acquired by the Indians) for the carriage of their refined products round the coast of India.

This complaint about the 'wide breach in the citadel of reservation' is voiced by almost every Chairman of Indian Shipping Companies.

At the Annual General Meeting of the Great Eastern Shipping Company, Ltd. (25.11.54), Mr. Bhiwandiwalla said, 'This oil cargo, which is almost equal to two-thirds of the entire coastal cargo.........could support a substantial tonnage. When shall we take the first steps to develop our own tanker trade ? As long as we continue to depend on foreign tankers for distributing the refinery products, the coastal reservation will, to a large extent, remain meaningless".

Similar sentiments were expressed by Mr. P. S. Vallabhdas, the Chairman of the Malabar Steamship Co. Ltd. at its Annual General Meeting held on 25th November, 1954.

## FIRST FIVE YEAR PLAN AND SHIPPING

The Plan outlines the importance of shipping to the nation from various points, including as a second line of defence in times of crisis and notes that the target of 2 million tons aimed at by the Shipping Policy Committee (1947) could not be achieved.

The Plan emphasises the need for an expansion of tonnage, for implementing the policy of coastal reservation, and for ensuring fuller participation in the overseas trade. The Plan mentions that the shipping companies are short of finances and the newly started companies have not been able to build up adequate reserves. It, therefore, sets a target of total tonnage at the end of the Plan period at 600,000 G.R.T. The Plan expects that some financial assistance in this expansion would be forthcoming from the International Bank.

*Coastal Shipping* : The Plan provides for the replacing of obsolete tonnage in the coastal trades from Central Government funds for constructing ships at the Vishakhapatam shipyard. This yard is expected to construct 100,000 G.R.T. during the Plan period. This yard is expected to sell ships to the shipping companies at reasonable prices and the cost and sale price differential will be treated as a subsidy to shipbuilding. This will also serve the purpose of linking the development of our shipping tonnage with the expansion of the shipbuilding industry.

It is estimated that about 300,000 G.R.T. are required to make coastal reservation effective.This covers the requirements of the coastal trade, as well as of India-Pakistan, India-Burma and India-Ceylon trades. The Plan provides for loans up to Rs. 4 crores to shipping companies to enable the latter to expand their tonnage. The shipping companies are expected to raise Rs. 2 crores by themselves. Considering the prevailing high prices, about 50-75 per cent of this additional tonnage will have to be second-hand.

*Overseas Shipping*: At present Indian companies are engaged in India-U.K.-Europe, India-U.S.A., and India-Australia routes. In order to make participation in these trades as well as in India-Far East-Japan route effective, it is necessary to acquire additional tonnage, which has been estimated at 100,000 D.W.T. excluding 60,000 D.W.T. required by the Eastern Shipping Corporation. The Government will advance loans to the extent of Rs. 6.5 crores, and the shipping companies are expected to provide Rs. 2.2 crores for the purpose of expanding tonnage for the overseas trades. The Planning Commission agrees that there is a justification for a lower differential rate of interest on loans for purchasing ships for the overseas routes. The lower interest rate has to be considered a form of shipping subsidy.

*Fiscal Concessions*: The shipping companies have urged the following fiscal concessions in order to enable them to raise funds for replacing obsolete tonnage and acquiring additional ships.

(*a*) Profit on sale of old ships may be exempted from taxation on condition that the entire sale proceeds are utilised for replacing the vessels.

(*b*) Depreciation allowances admissible for taxation purposes should be related to original cost or replacement cost, whichever is higher.

(*c*) The shipping companies should be entitled to seek assistance from the Industrial Finance Corporation.

Regarding (*a*) and (*b*) the Plan says that a uniform policy must be followed in these matters in regard to all the industries, and not shipping alone. As for the third suggestion a suitable legislation enabling the Industrial Finance Corporation to help shipping companies is under the active consideration of the Government.

### PROGRAMME OF ACQUISITION OF TONNAGE

| | Additional tonnage G.R.T. | Financial Investment Total | Financial Investment Foreign exchange |
|---|---|---|---|
| | | (*Rs. Crores.*) | |
| *Coastal Trade* : | | | |
| (*i*) Tonnage from Vishakhapatam yard | 100,000 | 9.0 | Nil |
| (*ii*) Additional tonnage | 65,000 | 6.0 | 6.0 |
| *Overseas Trade* : | | | |
| (*i*) Additional tonnage | 70,000 | 8.7 | 8.7 |
| (*ii*) Ships for Eastern Shipping Corporation | 40,000 | 6.0 | 6.0 |

The Plan says that at the end of the five-year period, the tonnage in the coastal trade would be about 315,000 G.R.T. and in the overseas trade 283,000 G.R.T. totalling about 600,000 G.R.T.

The Plan recognizes that these provisions will not meet all the requirements in the coming years. It therefore says that the requirements of replacement of overaged passenger ships, the nucleus of a tanker fleet, the acquisition of a certain volume of tramp shipping, etc., should be borne in mind in diverting unutilised funds earmarked for loans to shipping companies, and also any additional funds becoming available through foreign aid. The Plan notes that the Government will have to bear the entire cost of a tanker fleet.

*Sailing Vessels*: Sailing vessels play a very important part in our coastal trades. In 1949 it was estimated that there were 150,000 tons of shipping in 2,600 sailing vessels, with a capital outlay of Rs. 4 crores, employing about 40,000 men, and carrying annually between 1-1½ million tons of cargo. The Planning Commission is of the opinion that there is no need so much to embark upon large-scale expansion of tonnage under sail as to reorganise the industry on a rational basis in order to increase the effectiveness of the existing tonnage. The Plan therefore makes several useful recommendations for putting the sailing vessels industry on a sound footing.

The Government have since appointed a special organisation under the Director General of Shipping for implementing these recommendations.

*Technical Training* : The Plan provides for an expenditure of Rs. 1.10 crores for training schemes for marine engineers and merchant navy ratings.

*Port Development* : At present India has five major ports, *viz.*, Calcutta, Bombay, Madras, Cochin and Vishakhapatam. Their aggregate capacity of handling cargo is nearly 20 million tons per annum. This figure excludes petroleum, country-craft and bunkers. The traffic has been growing fast and this capacity is obviously inadequate.

Port development projects are an urgent necessity due to the following reasons also :—

(*i*) the need for rectifying the consequences of Partition and for providing a natural outlet for traffic previously catered for by Karachi;

(*ii*) a large part of the equipment of ports is now antiquated and obsolete;

(*iii*) the Central Government have undertaken to provide port facilities for the petroleum refineries to be set up at Bombay.

The Plan provides for the development of Kandla as a major port, to take over the traffic previously handled by Karachi and also to relieve Bombay of the pressure of traffic caused by the Partition. The cost of the Kandla port over the period of the Plan is estimated at Rs. 12.05 crores.

The Plan also provides for an expenditure of Rs. 8 crores for establishing port facilities for oil refineries and for providing alternative facilities for the existing establishments on the Butcher Island, off Bombay. The five major ports are badly in need of modernisation and development. A provision for Rs. 12 crores is made for these purposes for the Plan period, in addition to a sum of Rs. 15.5 crores, which the port authorities are expected to provide out of their own resources.

## INDIAN OWNED TONNAGE

(1st January 1953)

| | Owner | No. of ships | Fleet Tonnage G.R.T. |
|---|---|---|---|
| 1. | Scindia ... ... ... | 36 | 206,163 |
| 2. | Bombay Steam ... ... | 16 | 22,164 |
| 3. | India Steam ... ... | 8 | 58,401 |
| 4. | Bharat ... ... ... | 12 | 54,685 |
| 5. | Great Eastern ... ... | 4 | 15,282 |
| 6. | Eastern S. Corporation ... | 2 | 14,433 |
| 7. | Malabar ... ... | 3 | 7,809 |
| 8. | Dholera ... ... | 3 | 12,505 |
| 9. | National ... ... | 1 | 1,602 |
| 10. | Merchant ... ... | 3 | 4,059 |
| 11. | Africana ... ... | 1 | 1,432 |
| 12. | S.E. Asia ... ... | 2 | 1,422 |
| 13. | Ambica ... ... | 3 | 2,739 |
| 14. | Indian National ... ... | 3 | 11,536 |
| 15. | Gill Amin ... ... | 2 | 1,472 |
| 16. | Chandbali ... ... | 2 | 1,273 |
| 17. | Hindustan ... ... | 1 | 368 |
| 18. | Andhra ... ... | 1 | 473 |
| 19. | S. I. Railway ... ... | 2 | 1,943 |
| 20. | Swadeshi ... ... | 1 | 1,069 |
| 21. | Brunton ... ... | 1 | 184 |
| 22. | Akoijee Jadhav ... ... | 1 | 208 |
| 23. | Ashoka Line ... ... | 1 | 640 |
| 24. | Bhogilal ... ... | 1 | 189 |
| 25. | Tankers ... ... | 1 | 683 |
| | Total ... | 111 | 422,734 |

## SHIPBUILDING IN INDIA

Our country has only one large shipbuilding yard at Vishakhapatam, capable of building ships up to 15,000 deadweight tons. It was started by the Scindia Steam Navigation Co. Ltd. On June 21, 1941 its foundation-stone was laid by our present President Dr. Rajendra Prasad. In April 1942 there were stray bombings on Vishakhapatam by the Japanese. The Government, therefore, compelled the Company to remove, the machinery and personnel to Bombay, where a temporary shipyard was set up in three months. The yard built small war crafts but not yet large ocean liners which was the ambition of the Company.

In 1944-45 the Government wanted a repair base for ships in connection with the offensive operations against Burma and South-East Asia. They allowed the Company to start work at Vishakhapatam, and once again machinery and men were shifted from Bombay to Vishakhapatam. The Scindia Company resumed work on a small scale. It made efforts to develop the shipping yard according to their original designs. But progress on the work suffered on account of restrictions on the supply of materials due to the exigencies of war. The yard was completed in 1947. The first ship from this yard, the 8,000 tonner s. s. Jalausha was launched by the Prime Minister, Pandit Jawaharlal Nehru, on the 14th March, 1948. On this occasion he said, "Shipping and shipbuilding in India will not suffer and will go on at all costs. Rest assured that the Government is intimately interested in encouraging the industry. We are beholden to the Scindia Company for the enterprise it has shown in the past. It has waged a ceaseless struggle against foreign vested interests". The second ship of the same tonnage, s. s. Jalaprabha, was launched on 20th November, 1948 by the late Sardar Patel. Subsequently, two more sister ships s. s. Jalaprakash and s. s. Jalapankhi were launched by the end of 1949.

From almost the beginning the cost of construction of ships in this yard have been quite uneconomical. To save the yard from closing down the Government placed some orders for the construction of ships. In 1948 representations were made by the Scindia Company to the Government for taking over the yard by the latter. Thereupon the Government placed orders for six more ships to be constructed at the yard and agreed to subsidise them to the extent of the difference between the actual cost and the cost of a similar vessel constructed in the U.K.

In 1948 foreign consultants were invited by the Government to advise them on the possibility of constructing a second yard to be operated by the Government. However, in November 1949 the Government announced that the matter was postponed.

Later the Government decided to take over the Vishakhapatam yard. A new private company called the Hindustan Shipyard Ltd. was formed in January 1952 for this purpose. The Government hold shares in this Company to the extent of two-thirds. The total paid up capital of the Company is Rs. 309.9 lakhs, of which one third, *viz.*, Rs. 103.3 is contributed by the Scindia Company.

In April 1952 negotiations for technical assistance in the development of the yard were completed between the Hindustan Shipyard Ltd. and the Societe Anonyme des Ateliers et Chantiers de la Loire of Paris. The agreement came into force from the 15th July, 1952 and will be valid for five years. Before the Government took over the yard, the Scindia Company had already built eight cargo ships of 8,000 d.w.t. each. Under the agreement the A.C.L. will try to obtain from France and other countries the supply of steel, equipment, stores and other shipbuilding materials. They will also train and guide the Indian staff of the Hindustan Shipyard Ltd. in order to enable them to man the position of highest responsibilities in the shipbuilding yard. The A.C.L. will also endeavour to secure orders from abroad and, if necessary, try to bring about the sale of ships constructed at this yard. The Hindustan Shipyard Ltd. has agreed to pay to the A.C.L. a sum calculated at four per cent per annum of the turnover of the Company, in consideration of their advice and services.

The Hindustan Shipyard has embarked on a Rs. 2 crores scheme for increasing the capacity of the shipyard to six ships. An additional berth has been constructed and one more was to have been completed by the end of 1954.

The Government have recently accepted the principle of the construction of a dry dock in the yard. Interest free loan will be provided by the Government and it will be eventually converted into non-cumulative preference shares. These decisions of the Government will meet a long felt need and help increase the volume of ship repair work in the yard.

It is reported that the yard has received sufficient orders for ships which will keep its capacity fully utilised for about three years. Orders have been received from Indian Shipping Companies, as well as the Indian Navy.

The yard has to depend on imports of a number of components in the absence of the development of the industries ancillary to the shipbuilding industry. Another difficulty experienced by the yard is the absence of standardisation. The Chairman of the Hindustan Shipyard Ltd. is of the opinion that it is not necessary to have more than two or three types of ships for the present coastal trade in India. He says that ships for different runs can be standardised after full investigation of the needs of the trade. If standardisation is resorted to, it is expected that the initial cost as well as the price payable by the intending shipowners could be considerably reduced.

## INLAND WATERWAYS

Inland waterways have played a distinguished role in the economic life of the country since the earliest times and before the advent of the railways they were the main arteries of commerce. They flourished especially in the nineteenth century, but the coming of the railways diverted most of their traffic. Large irrigation projects resulted in reducing their flow of water, making many waterways useless for navigation.

The important waterway systems are in Bengal; the canals of the Mahanadi delta in Orissa; the Buckingham, Godavari, Krishna and Dummadudan systems in Madras; and the backwaters of southern Malabar. Before Partition Bengal had an extensive inland waterways system in the Ganga-Brahmaputra delta and it stretched up the Ganga in the heart of Uttar Pradesh, and up the Brahmaputra up to Dibrugarh. Although the Partition brought about economic dislocation of these parts, the inland waterways system has survived, thanks to the adaptability shown by the commercial companies. Even after Partition the inland waterways system of the North East (comprising about 5,000 miles) remains the most important in India. It serves the needs of the tea and jute industries of Calcutta to a major extent. It is estimated that nearly 1/12th of the merchandise handled by the Port of Calcutta is carried over the inland waterways.

There are two longest inland water routes. One runs from Calcutta to Patna on the Ganga and is 920 miles long. The other goes from Calcutta to Dibrugarh, via the Brahmaputra and is 1,175 miles long. The latter route was dislocated by the 1950 earthquake and also by the floods of 1954. It will take several years for the Brahmaputra to resume her normal course.

In 1950 it was estimated by an E.C.A.F.E. inquiry that country vessels in India and Pakistan carry more than 15 million tons yearly, over an average distance of not less than 300 miles. In addition 2½ million tons of cargo is carried annually by organised river steamship companies. Another estimate made in 1943 established that more than 6,000 heavy country boats were plying on the Ganga alone and had a total carrying capacity of about 111,000 tons.

The maintenance and improvement of navigational facilities on most rivers is the responsibility of the State Governments. However, in cases where the Parliament declares any waterways as national highways the responsibility would rest with the Central Government. The Central Water and Power Commission is responsible for surveys, planning and development of water transport. All inland steam vessels must now be registered under an Act passed in 1951.

The Government created the Ganga-Brahmaputra Water Transport Board in March 1952. The Secretary to the Central Ministry of Transport is its Chairman. The other members are the representatives of the Governments of U.P., Bihar, West Bengal and Assam. Other members representing railways, steamer companies and the Port Authority of Calcutta can be co-opted. The functions of this Board are, *inter alia,* the development of water transport, the improvement of navigational facilities, the handling of administraive problems, *e.g.,* registration and licensing, the fixing of passenger and freight rates, and the administration of a pilot project for towing country craft with shallow draught tugs. Assistance for this project is sought from the U.N. Technical Assistance Administration.

We give below a list of inland water projects under construction or contemplation of the Government.

1. A canal to link the lower Raniganj coal-field with the Hooghly.
2. A project to make the Mahanadi (Orissa) navigable for 300 miles from the mouth.

3. The Kakrapara project in Bombay.
4. The Ganga Barrage to provide a perennially navigable link between the Hooghly system in Murshidabad with the Ganga system in Bihar and Uttar Pradesh.
5. A project for linking the east and west coasts through the Ganga, Sone, Rihand and Narmada.
6. Projects for deepening and improving existing river channels, *e.g.,* that of the Ganga between Buxar and Allahabad.
7. A canal between Diamond Harbour and Kidderpore, Calcutta.

An Indian study group visited Europe and the U.S.A. in 1951-52 to study technological advances in inland water transport. They made the following recommendations :

(*a*) The desirability of experimenting with steel or light alloy barges.
(*b*) The investigation of the feasibility of constructing and using Diesel-engined, screw-propelled craft, instead of steam-engined paddle steamers.
(*c*) The desirability of experimenting with push towing and pull towing instead of the Indian system of towing abreast.
(*d*) The introduction of mechanical aids in handling goods.
(*e*) The assumption by Governments of responsibility for river conservancy.

# CIVIL AVIATION IN INDIA

## EARLY BEGINNINGS

In 1929-30 the international air services of the British, Dutch and French airlines were extended to India. The mails brought by these services for Indian destinations were initially disbursed through an arrangement made by the Government with Delhi Flying Club, and later Indian Government sponsored, Transcontinental Airways, but operated by the Imperial Airways.

The first Indian operated, financed and managed Company was the Aviation Department of Tata Sons Ltd., which started a weekly service on Karachi-Ahmedabad-Bombay-Bellary-Madras route from 15th October 1932. It operated single engined aircraft to carry surcharged mail offered by the Posts & Telegraphs Department under an agreement, and overseas mail brought into India by the foreign international services. In 1934, another Company the Indian National Airways began on similar terms to operate on Karachi-Lahore section. During the same year Tatas doubled their frequency on Karachi-Madras route and later followed with a weekly Bombay-Goa-Cannanore-Trivandrum service followed by a bi-weekly Bombay-Indore-Bhopal-Gwalior-Delhi service. The Indian National Airways operated on Calcutta-Dacca-Rangoon route.

In February 1938, under what is known as Empire Air Mail Scheme, the Government of India guaranteed Tata Sons a payment of Rs. 15 lakhs for carriage of mail on Karachi-Colombo route up to 500,000 lbs; plus Re. 1/- for each lb. of mail extra; and Indian National Airways Rs. 3. 25 lakhs on Karachi-Lahore route up to 130,000 lbs; plus Re. 1/- for each lb. of mail extra. This made possible for the first time utilisation of bigger aircraft with increased frequency and opportunities to develop passenger and freight traffic on commercial basis. During October 1938 the frequency was increased to 5 times a week on both the routes and the latter also established a thrice weekly service between Lahore and Delhi. In 1937-39, Air Services of India also operated Bombay-Kathiawar service on 6 times weekly basis.

The most important thing to note is the steady development in civil aviation without any assistance from the Government. Regularity and safety of operations was comparable with the best of any other nation. The Government also was improving ground facilities as best as it could and spent 1½ crores of rupees.

## SECOND WORLD WAR AND AFTER

Wartime exigencies necessitated suspension of all civil aviation and its diversion for Government and defence services. The Government also provided lease-lend aircraft for carriage of freight, military personnel, mails and civil priority passengers, and the operators also carried out special work like transport of troops, ammunitions, supplies, etc.; evacuation of civil refugees; servicing, overhaul, maintenance of R.A.F. aircraft in their own workshops. These placed them in financially sound position.

At the close of the war the Government formulated its post-war plans for development of civil aviation. Sir Fredrick Tymms, the then Director of Civil Aviation,visualised the prime need for the proper development of India socially, commercially and industrially, of establishing a system of air services linking the principal commercial and administrative centres of the country and connecting with principal neighbouring countries. He also made estimates of potential traffic and prepared estimates of aircraft, aircrews required for operating the requisite services. These exhaustive plans visualised "development and operation of air transport services, internal and external, by a limited number of sound and reliable private commercial organisations, with their own capital and operated under normal commercial principles of risk of losses and prospects of gains. The operation of air transport services would be subject to licences granted by Government...The grant of state assistance in specific cases will be entirely at the discretion of Government and on conditions to be laid down in each case. In specific cases, Government should take a financial interest in the companies operating air services and appoint a Director on the Board. The Government should not, however, take a controlling share in such cases".

The Government amended the Indian Aircraft Act to license air transport companies by the Air Transport Licensing Board set up for the purpose. Such a Board was to consider among other things (*a*) the proper development according to public needs, (*b*) traffic potential and (*c*) financial and technical resources of the operators and then issue licences.

The Air Transport Licensing Board was constituted on 1st October 1946, by which date no less than 21 companies had been registered with an authorised capital of Rs. 42 crores and issued capital of Rs. 9.7 crores. They acquired 115 Dakota aircrafts duly modified for transport purposes, whereas the post-war plans envisaged only 40 aircrafts for the necessary services. The A.T.L.B. received over 100 applications from 22 companies for 96 routes covering the whole of undivided India. They also competed among themselves for available personnel and some even brought foreigners. The Government also improved and strengthened ground and communication facilities to requisite standards, established flying and aeronautical communication schools, improved repair and overhaul facilities at their Hindusthan Aircraft Limited. The A.T.L.B. granted provisional licences for 11 companies on 52 routes till June 1949.

## EFFECTS OF PARTITION

The Partition of India in August 1947 changed the aviation map of India considerably. Orient Airways transferred its operations to Pakistan and I.N. Airways lost most of its routes. Jupiter and Ambica Airlines would have followed suit had it not been for refugee traffic offered to them on their charter operations. The regular operators also could not plan effectively as their licences were temporary and the Government was contemplating rationalisation.

## KIDWAI'S 'ALL-UP' MAIL SCHEME

Other notable developments during the period were Government assistance to the industry and the 'All-Up' Mail Scheme introduced by the late Mr. Kidwai, the then Communications Minister. This scheme abolished surcharge on mails and this increased revenue payload of the operators. The Government also granted a rebate of import duty of 6 annas per gallon, later increased. to 9 annas per gallon of petrol consumed in civil aviation. The minimum guarantee of remuneration to Air-India and Indian National Airways under the Empire Air Mail Scheme was reduced to Rs. 10 and Rs. 1 lakhs, respectively.

## NIGHT AIRMAIL SCHEME

The Posts and Communications Minister of the Government of India, the late Mr. Kidwai during his term of office introduced a scheme whereby all the surcharged mails from the main cities of India, *viz.*, Bombay, Calcutta, Madras and Delhi could be carried quickly at night, 4 planes leaving simultaneously from these points and exchanging them at Nagpur and returning to their bases. Later all first class mails were offered by the Postal Department. The Government discussed the scheme with all the existing operators, who wanted a guarantee of minimum load or any higher rate of remuneration for carriage of mails then already in force. Originally the scheme was for carriage of mails and freight only as these routes were not properly equipped for night flying. Indian Overseas Airlines who agreed to operate without any guarantee were granted a provisional licence in February 1949, which was subsequently extended to June 1949. They carried 48,000 lbs. of surcharged mail and with the introduction of All-Up Mail Scheme from 1st April 1949, this load more than trebled. The Scheme was suspended during the monsoon of 1949.

Owing to the financial difficulties of the Indian Overseas Airlines since the middle of the year and also because other operators were insisting on a guaranteed minimum payment, the A.T.L.B. granted a temporary licence of night airmail to the Himalayan Aviation who were operating non-scheduled services. They were allowed to carry passengers also on their services as navigational and other aids were added to the route organisation. These services attracted huge traffic both mail and passengers and deprived regular operators of their revenue load. Thus a non-scheduled operator was made a regular operator adding to the burden of difficulties of the regular operators.

### AIR TRANSPORT INQUIRY COMMITTEE, 1950

As a consequence of these difficulties the Press and the Parliament discussed the matters and the Government set up an Air Transport Enquiry Committee to review the present state of air transpot in India and advise the Government on the best lines on which future development might be organized.

This Committee submitting its report summarised the defects and difficulties of Air Transport Industry. They stated.

(*a*) The number of operating units is much greater than that required to conduct the existing volume of air transport on an economic basis;

(*b*) this has resulted in :—

(*i*) multiplication of overheads, thereby increasing costs and;

(*ii*) wasteful competition amongst operators resulting in reduced revenues, (*c*) over-equipment of the companies, with consequent drain of capital resources, low utilisation and heavy current running cost;

(*d*) competition between the operators for a comparatively limited supply of technical personnel, resulting in rise of wages and salaries to high levels, which has contributed in turn to excessive operative costs;

(*e*) building up by some companies of organisations far too big for the volume of work on hand;

(*f*) high costs of aviation fuel and the incidence of the States' sales or other taxes;

(*g*) a tendency to reduce fares to uneconomic levels.

The Committee on the basis of its findings recommended the reorganisation of the industry and *inter alia* suggested that the six-term licence-holders will operate their routes unless their number is reduced by mergers. According to them, the ideal pattern would be four operators with bases at Bombay, Delhi, Calcutta and Hyderabad, as that would be a good geographical and zonal distribution and would provide for servicing and overhaul facilities. They definitely recommended that the licence of Himalayan Aviation should not be renewed and accepted the operators' view-point of a minimum guaranteed revenue of Rs. 3/- per mile for night services. They suggested a certain redistribution of routes. Regarding the level of passengers, they recommended a 10 per cent profit on the fixed capital assets employed with a minimum of 3¼ annas per mile and a maximum of 4½ annas per mile according to categories of routes and the load factor likely to be obtained. For freight the Committee recommended that the rate should be subject to a maximum of ½ per cent of the passenger fare per pound of freight. The rate for carriage of mails should be 12½ per cent more than the freight rate owing to the priority that has to be given for mails.

As a result of such reorganisation any surplus aircraft should be disposed off outside the country or absorbed in the Indian Air Force. Retrenchment amongst the staff should be restricted primarily to semi-skilled and unskilled workers, clerks, etc.

The financial assistance to the operators should be continued in the form of rebate of petrol duty and also otherwise under certain circumstances.

### COMMITTEE'S CASE FOR STATE OWNERSHIP

Regarding the State ownership they made out a good case. The summary of their arguments is as follows :—

1. One unit in charge of all the operations can use the available resources to maximum advantages.
2. Operations by a State organisation would be an advantage from the point of view of defence.
3. Without the same predominant profit motive as in the case of private enterprise, a State organisation would operate with the main policy of giving better and cheaper service to the public.
4. Only a unified organisation would be large enough to take full advantage of the technical developments which are rapidly taking place in civil air transport equipment and operational techniques.
5. A unified administration would bring about a certain amount of economy in expenditure, compared to operation by several units. This economy was estimated at 8½ per cent.
6. The private airlines to be put on their feet would require a certain measure of assistance from Government. If the industry is to be assisted by Government it will be preferable for Government themselves to run it in their own way.

### CASE AGAINST STATE OWNERSHIP

Countering these favourable points are managerial reasons, *viz.*, maximum initiative and technical efficiency to keep pace with developments, exceptional readiness to take financial risks in replacing equipment and constant personal attention to all the customers. Also in as much as the industry caters only to fairly well-to-do state of the society it would conflict with other developments mostly for the common man. There is a further difficulty of obtaining sufficient number of persons combining business and administrative experience for managing such enterprises. It would also be going against the public policy as 10-year licences had already been given to the operators.

### THE AIR CORPORATIONS ACT, 1953

The Government accepting the recommendations of the Committee passed the Air Corporations Act in 1953. Two Corporations, Air India International for external services, and Indian Airlines Corporation for internal services were created by the Act. They were to acquire the existing air companies compulsorily and for this they were to be compensated according to the provisions of the Act. Such compensation was to be paid in the form of bonds of the face value of the amount of compensation. The Central Government is to have full power over the functions of these Corporations and could issue directions to that effect. Each Corporation was to submit its report for every financial year to the Central Government, who would place the same before both the Houses of the Parliament.

The following table shows the progress of aviation.

| Particulars | 1946 | 1950 | 1953[1] |
|---|---|---|---|
| Hours Flown ... | 29,500 | 1,18,366 | |
| Miles Flown ... | 45,00,000 | 1,88,57,400 | 1,96,00,000 |
| No. of Passengers carried ... | 1,05,000 | 4,82,612 | 4,72,000 |
| Mail carried (Lbs.)... | 10,26,000 | 92,72,400 | 88,20,000 |
| Freight carried (Lbs.) | 15,18,000 | 7,58,91,000 | 9,63,00,000 |
| Total Traffic carried (Ton-miles) ... | 63,91,000 | 3,39,80,000 | 4,11,59,000 |
| Load Factor ... | 74.8% | 65.1% | |

[1] Figures based on average figures for first 6 months for which the figures are available.

## EXTERNAL SERVICE

The suggestions made by Air-India for establishing air services to the West were approved by the Central Government and Air India International was created with a paid up capital of Rs. 2 crores, with Government contributing 49 per cent of the capital, 20 per cent by Air India and the rest by public subscription. The company obtained 3 Constellations. Agreements were made with Air India whereby they were appointed technical advisers and chief traffic agents. The Government also agreed to reimburse Air India International any loss incurred by it for a period of 5 years. They were also granted exclusive rights of operations for a period of 10 years.

The company's service was inaugurated on 8th June 1948 with a weekly frequency on Bombay-Cairo-Geneva-London. It was progressively increased to thrice a week and is at present operating the following services.

Thrice weekly to London,
Twice weekly to Nairobi,
Once weekly to Tokyo.

Bharat Airways and Indian Overseas Airlines were licensed to operate Calcutta-Bangkok-Hongkong-Shanghai-Tokyo and Calcutta-Bangkok-Singapore to Australia, respectively. The former started its service to Bangkok only. The latter could not operate owing to its fianancial difficulties.

## CONCLUSION

The progress of Indian aviation since nationalisation is gradual and quite encouraging. Though financially not profitable for the Indian Airlines Corporation. As the latest reports indicate the Indian Airlines Corporation have made a loss of Rs. 1.26 crores in the first completed year of its operations, whilst Air India International have made a profit of Rs. 25 lacs. The net loss of Rs. 1 crores which ultimately falls on the public exchequer is quite huge compared to the benefits and the services operated. No information regarding payment for mails is available, though it would be at the rate recommended by the Committee. Would it then be worthwhile to continue the present scale of operations and plan for more ambitious schemes as the Communications Minister has advocated ? Would not the Committee's recommendations for nationalisation of route patterns be adopted at an early date ? The various Committees appointed by the Indian Airlines Corporations have submitted their reports which are still to be considered and implemented. A decision on the staff has already been taken by the Board of the Corporation which is going to enhance the wages and salaries bill by another 10-20 lakhs every year. Such a piecemeal consideration of these reports would jeopardise the finances of the Corporations considerably unless they are properly checked and controlled by the Board of Corporations at an early date. An alternative would be a mass retrenchment and cutting down of expenses as was done by the British Corporations in 1949. It is desired that the laudable objectives with which these Corporations are created would be borne in mind and completely followed as this branch of transport system is highly technical in its nature and therefore financially liable to suffer considerably if not properly managed.

## SELECTED BIBLIOGRAPHY

1. British Railways Today by K. G. Fenelon.
2. British Railways Since the War by K. G. Fenelon.
3. Britain, an official handbook by H.M.S.O., London.
4. Reports on the Progress of Civil Aviation in India, Govt. of India.
5. Japanese Industry: Its Recent Developments and Present Conditions by G. C. Allen.
6. International Rail Transport by Ralph L. Wedgwood.
7. Road and Rail in Forty Countries by Wohl and Albitreccia.
8. Indian Shipping by Asoka Mehta.
9. The Scindia Chronicle, the Struggle of Indian Shipping, 1919-52, Scindia Steam Navigation Co. Ltd.
10. Japan, A Commerce Survey, Special supplement to Commerce 28.8.54.
11. International Economics by Enke and Salera.
12. Japan's Economy in War and Reconstruction by Jerome B. Cohen.
13. United States of America by H.M.S.O., London.
14. Air Transport Management by Nicholson.
15. Civil Air Transport by Wynn.
16. Economic Development of the U.S.A. by Thompson and Jones.
17. International Air Transport and National Policy by Lissitzyn.
18. What The Citizen Should Know About The Merchant Marine by Carl D. Lane.
19. International Sea Transport by Osborne Mance.
20. The Railway Gazette, London : Weekly.
21. Report of the Air Transport Inquiry Committee by Government of India.
22. Indian Railways, One Hundred Years 1853-1953, Government of India.

23. India, Economic and Commercial Conditions in India by Rowland Owen, H.M.S.O., London.
24. Kaybee's Indian Shipping Annual by Ed. K. B. Vaidya.
25. Transport, Bombay; Monthly.
26. First Five Year Plan, Planning Commission.
27. Transport by National Planning Committee.
28. History of the Indian Navy by C. R. Low.
29. Indian Economics by Jathar and Beri.

## CHAPTER IV

# NATIONAL INCOME

We propose to devote this chapter to the measurement and analysis of the national income of the U.S.A., Great Britain, India, Russia, Japan and Germany. We shall have to deal with each country separately for a variety of reasons. The definitions of national income adopted in different countries may differ. Data for certain items may not be available in certain countries. In countries with different standards of living, various items are of quite different importance. Further, estimates for the same country for different periods may not be comparable without the necessary adjustments and corrections. It may be that the definition of national income has itself undergone certain changes in the meantime, and that, in the course of time, new data may have been made available. An item thought to be trifling in earlier periods might have become an important one in later periods. The problem of comparing the real national income as against the money incomes of different countries and for different periods presents greater difficulties still. No wholly satisfactory method is available for this purpose.

We shall begin with the trends in and the structure of the national income of the U.S.A.

## THE UNITED STATES OF AMERICA

The contribution of Simon Kuznets in this field is a monumental one. It enables us to make a review of the long-term changes in the national income. The national income or the net national product can be viewed at in two different ways. When viewed at from the final products approach, it would include the flow of all commodities and services to the ultimate consumers at cost to them. It would also include services rendered by Government to ultimate consumers, net additions to the stocks of commodities in the hands of business enterprise and government, and the net changes in claims against foreign countries. When viewed at from the flow of incomes approach, the national income would include payments to all factors net of all taxes. It would also include direct services by Government to ultimate consumers, undistributed profits of corporations, net savings by Government derived as the excess of the current receipts over the current expenditure and the net flow of income from abroad. The gross national product would equal the net national product as defined above plus the current consumption of durable capital in the hands of business enterprises and government.[1] Kuznets has made the basic estimates of the gross national product and the net national product for 1919-38 on the basis of the flow of incomes approach. On the basis of approximation to the flow of finished goods and capital formation, these estimates were then extrapolated by him to give the corresponding estimates for the period 1869-1919. Estimates for 1939-48 were extrapolated on the basis of the Department of Commerce estimates for years since 1938. To enable comparison of the figures over so long a period, an adjustment was made for price changes and the estimates were expressed in constant prices. The 1929 prices were taken as the base. The annual average of the gross national product, on this basis for the decade 1869-78 was 10.4 billion dollars. It rose to 56.2 for the decade 1909-18, 77.8 for 1919-28, 81.7 for 1929-38 and 128.4 billion dollars for 1939-48. The corresponding figure of the net national product for 1869-78 was 9.4 billion dollars which rose to 50.3 for 1909-18, 69.0 for 1919-28, 72.0 for 1929-38 and 108.9 billion dollars for 1939-48. These figures are based on certain assumptions and are subject to certain biases. The assumption of constant transportation and distribution charges has thus been made.

---

[1] p. 30, Income and Wealth of the United States, Trends and Structure, Income and Wealth Series II, Edited by Simon Kuznets.

During war periods, the Government manufacturing establishments have been omitted and the comparative price levels of output have been arbitrarily fixed. It has also been assumed that the final product of the Government was equal to the direct services to the ultimate consumers as measured by their direct taxes plus the net increase in Government capital financed out of current receipts. Further, for want of data, it has not been possible to include the full product of processes carried on within the households; on the other hand, the estimates of products turned out by business firms have been fairly accurate. During the period under review, the proportion of production within the households and the family has declined while that of the business firms has expanded. The recent estimates are, therefore, subject to an upward bias. The figures of the net national product reveal, on an average, a rapid rate of growth during the last century. The depression of the thirties of the present century pulls the rate of growth in a drastic manner while the war period that follows it, records a significant rise.

The annual average of the net national product per capita for the decade 1869-78 at 1929 prices was 216 dollars; it rose to $515 for 1909-18, $612 for 1919-28, dropped to $572 for 1929-38 and again rose to $790 for 1939-48. While the figure was almost trebled during the period prior to the Great Depression, it recorded an absolute decline during the thirties. This was, no doubt, more than offset by the rise during the war period. These figures for the net national product include the figures for the net capital formation. The entire net national product is not thus utilised towards the satisfaction of the wants of ultimate consumers but only that part of it which remains after an allowance is made for the net capital formation. The latter is a measure of the flow of goods to consumers. On a per capita basis, it rose from $195 for 1869-78 to $728 for 1939-48. One gets a clearer idea of the satisfaction derived by the ultimate consumers when one notes that this rise was brought about in spite of an increase in the weekly leisure hours from 11 for 1869-78 to 30 for 1939-48. The higher productivity of the labour force enabled such a rise to materialise. In spite of the decline of about thirty per cent in the index of the standard hours per week, the net national product per worker grew substantially from $654 in 1869-78 to $ 1786 in 1939-48. Demographic changes in the labour force, more extensive training of labour and greater supply of capital per worker can be some of the important contributory factors leading to a higher productivity of labour. In the U.S.A. the last of these three factors indeed played an important role. Taking 1929 prices as the base, the reproducible capital per worker rose from $2.3 thousands in 1879 to $5.9 thousands in 1929; after 1929, it ceased to rise and, in fact, recorded a decline to $5.7 thousands in 1944. Further, the proportion of unskilled labour declined from 36% in 1919 to 26% in 1940, a significant fall that contributed towards an increase in the product contributed towards an increase in the product per man-hour. The changes in the age and sex composition of the labour force were not as significant as those of the two other factors noted above. The proportion of workers below 20 years of age dropped from 15.2% in 1890 to 7.5% in 1940 while that of workers 55 years or older rose from 11.5% to 14.2% for the corresponding years. The group below 20 years of age is well below the best productive ages while the group above 55 years is somewhat above the best productive ages. The presence of either of these two groups in the labour force would thus tend to result in a decline in the product per worker. In 1890, the two groups totalled to 26.7% while in 1940, they totalled to 21.7%. The shift in the age-composition of the labour force cannot thus be regarded as a very significant one. During the same period, the proportion of women in the labour force rose from 17% to 24%. Considering the fact, however, that the reduction in the standard work week enabled women to enter the labour market in increasing numbers and to work with an efficiency not much inferior to that of men, this shift in the sex composition of the labour force cannot be regarded as a material one.

The percentage share of the commodity-producing industries, *viz.*, agriculture, mining, manufacturing and construction, in the net national product declined from 52.4 for 1869-78 to 38.9 for 1939-48. These shares are based on indexes of physical volume of output. While the shares of agriculture and construction dropped from their respective percentages of 27.4 and 5.9 for 1869-78 to their respective percentages of 7.5 and 2.0 for 1939-48, the shares of manufacturing and mining rose from 17.7 and 1.4 to their respective percentages of 27.4 and 2.0 during the same period.[1] The percentage share of the capital-intensive transportation and public utility industries rose from 8.2 for 1904-13 to 10.3 for 1939-48.[1] The share of the commodity-producing industries for 1904-13 was 42.7% If we exclude the capital-intensive transportation and public utility industries from the service industries, we find, contrary to the prevailing impressions, that the share of the service industries rose very slightly indeed, *viz.*, from 49.1% for 1904-13 to 50.8% for 1939-48. The service industries include trade, service, Government and finance (and miscellaneous). Expressed in current prices, the percentage share of Government and service groups rose from 5.4 and 8.9 to their respective figures of 17.2 and 10.5, while that of trade and finance actually declined from 15.0 and 16.2 to their respective figures of 13.3 and 10.2 We have noted above the shares of different industries in the national product. If we compare them with the percentages of labour engaged in the respective industries, we get an idea of the level of output per person engaged in each industry. The percentage of labour engaged in agriculture was 17.4 for 1940 and 12.8 for 1947-49, while its share in the national product for 1939-48 was 7.5%. For 1947-49, the corresponding percentages of labour for manufacturing, construction and mining were 26.0, 5.6 and 1.7, respectively. For transportation and public utilities, trade and Government the corresponding percentages were 7.4,

---

[1] p. 102, Income and Wealth of the United States, Trends and Structure, Income and Wealth Series II, Edited by Simon Kuznets.

19.1 and 11.8 respectively, the combined percentage for service, finance and miscellaneous being 15.8. The level of output per person engaged in agriculture has thus been lower when compared with the levels in the rest of the economy, while that in the service industries is much above the general level in the country. The reasons are not far to seek. The amount of fixed capital per person engaged determines to a great extent the level of product per person engaged in a particular industry. Taking 1929 as base and excluding land, the ratio of fixed capital per engaged person to the countrywide fixed capital per engaged worker in 1938 was as high as 5.88 in transportation and public utilities and as low as .36 in agriculture. Between these two extremes lay the mining and manufacturing industries with the ratio of .55.

While the annual average of aggregate payments or of the flow of incomes to individuals was 142.6 billion dollars for the decade 1939-48, it was 38.2, 69.8 and 63.2 billion dollars for the decade 1909-18, 1919-28 and 1929-38, respectively. The corresponding figure for the national income or the net national product for 1929-38 was 128.5 while that for the three previous decades referred to above was 36.3, 72.2 and 61.3 billion dollars, respectively. We thus find that the payments total was within 5% of the national income for the earlier three decades; it was only in the last decade that the difference amounted to about 10%. Obviously the extent of savings or dissavings of business corporations would be quite small relative to the net output of the nation. Similar is the case with Government savings. In a society anxious to minimise the tax load the capital investment of the Government out of current revenues forms relatively a small amount.

The different types of incomes can be broadly divided into two categories : the service incomes and the property incomes. The former includes the employee compensation and the entrepreneurial income; the latter is composed of incomes in the form of dividends, interest and rent. The share of the service incomes in aggregate payments rose from 76.5% for the decade 1870-80 to 78.8% for 1929-38, a very slight rise indeed. In other words, the shares of service and property incomes remained more or less constant during this period. It was only during the decade 1939-48 that the share of service incomes rose to 88% while that of the property incomes declined drastically to 12%. During the period of the second World War, there was a great expansion of output without a corresponding increase in capital stock. This resulted in a decline in the ratio of capital to product and hence an increase in employee compensation from 64.1% for 1929-38 to 69.6% for 1939-48. The share of the entrepreneurial income during this period also rose from 14.7% to 18.4%. This can be explained by the rise in prices during war and post-war years which benefited in particular the farmers and the commodity handling entrepreneurs. On the other hand, as per Government policy of maintaining low interest rates on Government securities issued to finance the war, there was recorded a decline in the interest rates and yields on property. The shares of dividends and interest thus declined during this period from their respective percentages of 6.1 and 10.0 to the levels of 3.5. and 4.5, respectively. We have observed above that prior to the second World War, there was noticed little change in the share of service incomes. Though the total of the service incomes showed little rise, we notice a conspicuous change in the two components of the service incomes, *viz.*, the employee compensation and the entrepreneurial income. We thus notice a distinct rise in the share of the employee compensation from 50% for the decade 1870-80 to 64.1% for 1939-48. In contrast the share of the entrepreneurial income displayed a downward trend from 26.4% to 14.7% for the corresponding decades. The decline in the relative importance of industries dominated by individual and unincorporated firms and the spread of corporate firms in industries formerly dominated by individual firms account for this downward tendency.

A study of the amount of income owned by the top 5% gives us an impression of substantial inequality in the distribution of income by its size. The top 5% owned as much as 19.4% of the total national income for the decade 1939-48; for the previous two decades the corresponding percentage was almost constant at 25%. After payment of the Federal Income Tax, the percentage for the latest decade dropped to 16.4, while that for the previous two decades dropped to 24. It thus appears that it was only during the last decade that the extent of inequality was reduced to a certain extent. After deduction of income-tax, the top one per cent shows a conspicuous decline from 12% during the previous two decades to 7.3% during the last decade.

A study of the distribution of the national income by the type of use to which it is put, leads us to certain significant conclusions. The national product can be apportioned between the flow of goods to consumers and the capital formation. The rate of net capital formation to the national income for the whole period 1869-1948 amounted to about 12%. During recent decades, the rate has undergone a decline. This implies a downward trend in the rate of savings of the individuals. This is particularly significant when we call attention to the fact that the per capita income even when adjusted for price changes, shows a marked rise over this period. The modern mode of living with its emphasis on a high standard of living, increased urbanisation and the shift from the entrepreneur to the employee status are some of the important contributory factors leading towards such a downward trend. An analysis of the components of the flow of goods to consumers also lends support to this view. The share of commodities associated with country life and work at home has drastically declined while that of relatively new commodities like passenger automobiles and electric appliances has risen. The three main components in the net capital formation are construction, producers' durable equipment and inventories and foreign claims.

It is residential and public utility construction whose proportions to national product declined between the last quarter of the nineteenth century and the first three decades of the present century to an extent which largely accounts for the decline in the share of capital formation in national income.[1] The share of the net capital formation in the net national product declined from 17.4% for 1879-88 to 9.9% for 1939-48. We may, however, note that the share of the producers' durable equipment in the net capital formation records a rise during this period.

We may conclude by pointing out the comparatively limited involvement of the U.S. economy in the economic network of nations. For the decade 1939-48, the outflow of goods from the country formed just 8.5% of the value of the gross national product, the corresponding percentage for the inflow of goods being only 4.3%. Even in migration of men, the recent decades have witnessed the dwindling of the flow and the percentage of foreign-born workers to the total gainfully occupied persons declined to as low a figure as eleven in 1940 from the corresponding figure of 19.7 for 1900. We have, however, always to distinguish between the peace-time flows and the war-time flows. Further, we should note that small percentage shares by themselves do not necessarily imply indexes of minor effect and that in modern times, the pattern of economic growth in every country is materially affected by the patterns in other countries.

---

[1] p. 184, Ibid.

## THE UNITED KINGDOM

The publications of the Central Statistical Office, H.M. S.O., London, on National Income and Expenditure provide us with a wealth of up-to-date data on the subject. They enable us to analyse the national income into its components and to measure the transactions that take place between the different sectors of the economy. The system of social accounts tracing every important money flow from its origin in one account to its destination in another has also been highly developed.

The national income can be considered as a sum of incomes or as a sum of expenditures. It can thus be the total of the incomes of all the residents, institutions, companies and the Government so far as they are derived from current economic activity. Incomes such as old age pensions, national insurance benefits and family allowances are not derived from economic activity and have, therefore, to be excluded. So is the case with the interest on the National Debt which has been incurred almost exclusively in financing abnormal current expenditures mainly in war and which cannot, therefore, be regarded as the counterpart of any real assets yielding an income of newly produced goods and services. All wages and salaries including those of the Government employees and the Armed Forces as well as rents and profits are to be included. Finally, the total income arising in the country has to be adjusted by subtracting the income paid abroad and adding the income received from abroad.

We have already noted that the national income can also be regarded as the sum of expenditures on goods and services. As all economic activity leads to the production of goods and services, this sum should be exactly the same as that of incomes. Precautions to avoid double-counting have, however, to be taken. For example, any goods and services bought by a business enterprise for resale have to be excluded. Such an expenditure is appropriately termed as an intermediate expenditure as against the 'final' expenditure by individual persons and families on goods for their own consumption. The expenditure by the Government on goods and services used by it in providing collective public services for which no charge is made or the formation of capital are the other illustrations of final expenditure. The expenditure on capital formation may take the form of the acquisition of new capital assets or the addition to stocks and work-in-progress. Another important point has to be borne in mind. As the final expenditure of buyers in the country on imported goods and services generates incomes not in the country but abroad, the value of the current imports must be subtracted from the total of expenditures by the final buyers in the country. The value of exports must, on the other hand, be added to the total of the expenditures. The final expenditure so adjusted by exports and imports gives us the domestic product in the country. This when adjusted by the addition of net income from abroad gives us the national income of the country. When it is expressed in market prices, it is also termed as the gross national expenditure at market prices. It will then cover income arising in production as well as any tax levied on sale. Converse will be the case when the market price of certain goods and services is reduced below the cost of production by the payment of Government subsidies. In such cases, it is necessary to subtract the amount of indirect taxes from the national expenditure at market prices and to add subsidies to it in order to arrive at the figure of the gross national expenditure at factor cost which is also termed as the gross national product.

The gross national expenditure at factor cost for 1952 amounted to £ 13,653 millions. Of this the consumers' expenditure amounted to £10,478 millions while the current expenditure on goods and services by the public authorities amounted to £ 2,915 millions. The item of the gross domestic capital formation accounted for £ 1,931 millions. After adding, to the total of these three items, the value of exports and the income received from abroad, *viz.*, £ 4,052 millions, and subtracting therefrom the value of imports and the income paid abroad, *viz.* £ 3,857 millions, we arrive at the gross national expenditure at market prices, *viz.*, £15,519 millions. To arrive at the gross national expenditure at factor cost, we add subsidies, *viz.*, £ 416 millions and deduct taxes on expenditure, *viz* £ 2,282 millions.

Of the various components referred to above, the gross domestic capital formation needs further explanation. The national income measures what is available to the nation for consumption or for adding to wealth after maintaining capital in tact. In other words, to arrive at the figure of the national income, an allowance must be made for the current depreciation of the capital at current replacement cost. In actual practice, however, it is not possible to follow this principle as the depreciation allowances are those granted for taxation purposes and show sharp changes in accordance with changes in the tax laws. If an allowance is made for them, we do not get a correct measure of profits earned by the entrepreneurs but a measure vitiated by these factors. Thus, an attempt to separate the depreciation from the gross capital formation to arrive at the net capital formation, has to be given up. The figure of the gross national expenditure at factor cost that we thus get is, therefore, equivalent to the national income plus the depreciation provisions, *viz.*, £13,653 millions. We may further note that the item of gross capital formation is composed of two different parts, *viz.*, the fixed capital formation which amounted to £ 2,054 millions and the value of the physical increase in stocks and work-in-progress, which showed a negative balance of £123 millions. It becomes necessary to include the latter item as the aim of the procedure in accounting is to maintain intact the money capital, the value of stocks and work-in-progress being thus set at cost or at market value whichever is lower. In periods of rising or falling prices, such a procedure results in vitiating the true share of the entrepreneur in the national income. The concept of the national income requires that the contribution of the entrepreneur should be reckoned after charging as a current cost the replacement cost of materials used in production. If prices are changing, this replacement cost will be different from the original cost. As the procedure in accounting is not based on this principle, it becomes necessary to treat the expenditure which raises the physical volume of stocks not as a cost of production but as a part of capital formation.

The gross national product when measured from the income side means the sum of the gross domestic product at factor cost or the total income from economic activity in the United Kingdom and the net income of the U.K. residents from abroad. For 1952, the former amounted to £ 13,525 millions and the latter to £ 128 millions, thus totalling up to £ 13,653 and tallying with the gross national expenditure at factor cost. £ 13,525 millions is the value of the gross domestic product and not the net one as it includes provisions for depreciation. It, however, makes an allowance for stock appreciation to the extent of £ 50 millions. The domestic income including provisions for depreciation and stock appreciation is, thus, £ 13,525 plus 50, *i.e.,* £ 13,575 millions. This can be broadly classified into two divisions. The pure labour incomes on the one hand and the profit incomes on the other. The group of pure labour incomes has three components : wages and salaries amounting to £8,215 millions, the pay allowances of the armed forced amounting to £ 350 millions and the employers' contributions amounting to £ 377 millions. The other group of profit incomes may be further subdivided into two sub-groups. The pure profit incomes and the mixed incomes which are partly a reward for work and only partly an income from property. The latter forms the income of self-employed persons and amounts to £ 1,473 millions and covers the field of non-corporate business enterprise. It comprises of professional earnings, income from farming and profits of other sole traders and partnerships. The former comprises of four items : the gross trading profits of companies amounting to £ 2,350 millions; gross trading surpluses of public corporations amounting to £ 262 millions; the gross profits of other public enterprises amounting to £ 2350 millions and rent amounting to £ 44 millions. The public corporations referred to above are broadly speaking the boards of nationalised industries and enjoy a considerable degree of autonomy while the other public enterprises are public trading bodies like the Government trading departments and the local authority trading services which enjoy a comparatively less financial independence. In the item of rent, an allowance is also made for the income from owner-occupied houses. This is a case of an imputation of an estimate in spite of the absence of any money transaction. It is, however, necessary as otherwise the national income would shrink merely because certain tenants have bought the houses they were living in. Totalling up the labour and profit incomes we thus get £ 13,560 millions to which the residual error of £ 15 millions is added to arrive at £ 13,575 millions.

## THE SOCIAL ACCOUNTS

The system of social accounts has been highly developed in the United Kingdom. A social account is conceived of as an account of a single entity or group of entities such as persons, companies and Government, or for the economy as a whole recording its transactions in some particular field of activity. It is termed as an account because it records both the payments by and the receipts of the group engaged in the particular activity. The items on the two sides are so defined that their totals must balance. The social accounts can be broadly divided into two classes; the accounts between different kinds of economic activity and the accounts between different sectors or groups of entities. Under the former, we deal with three different economic activities, *viz.*, production, consumption and adding to wealth; under the latter six sectors are recognised, *viz.*, persons and private non-profit making bodies, companies, public corporations, Central Government, local authorities and rest of the world in so far as it has transactions with the U.K. We do not propose here to deal with the latter but only with the former set of accounts.

Let us first deal with the production account of the U.K. for 1952. Here we take 'production' in the wide sense to include transport, distribution and personal services as well as the work done by the domestic servants, the employees of public authorities including the armed forces and the 'services' of houses. The receipts of such an account are chiefly the sales of goods and services to final buyers, *viz.*, £ 10,350 millions for persons and £ 2,761 for the public authorities. They would also include the gross domestic capital formations, £1,931 millions,the subsidies,£416 millions and the stock appreciation, £50 millions. Finally, they would include the transactions with the rest of the world, *viz.*, exports of goods and services amounting to £3,568 millions. The receipts side would thus total up to £19,076 millions. On the payments side, the account shows the various current operating expenses, that is, the income payments to employed factors of production, *viz.*, income of employees and the forces, £ 8,942 millions, income of self-employed persons, £1,473 millions, the gross trading profits of companies and public corporations, £2,612 millions, the gross trading profits of other public enterprises, £44 millions and rent £489 millions. The payments side would also include the taxes on expenditure, *viz.*, £2,282 millions and finally, the purchase of goods and services from the rest of the world, *viz.*, imports amounting to £3,219 millions, thus totalling up to £19,076 millions.

We may now deal with the income and expenditure account for 1952 underlying the consumption of goods and services. It shows the source of the current income and the various ways in which it is dispensed with. The current income is derived partly from services to production and partly from transfers from other sectors. We shall refer separately to the income and expenditure accounts, of persons, companies and public corporations and the public authorities. On the receipts side of the income and expenditure account of persons, are the items of income of employees and the Forces and the income of self-employed persons. The item of rent accounts for £173 millions. These three items are derived from services to production and are, therefore, paid from the production account. The current income of persons is also derived from transfers from other sectors, *viz.*, current grants from public authorities, £907 millions and interest and dividend payments plus income earned abroad, £1,133 millions. These incomes are thus paid from the other income and expenditure accounts. The receipts side thus totals up to £ 12,628 millions. The payments side of the account for persons, the current expenditure on goods and services amounts to £10,478 millions, of which goods and services purchased from the production account for £10,350 millions and those purchased from overseas, *i.e.,* tourist expenditure, accounts for the remainder. The direct tax payments and the national insurance contributions amount to £1,694 millions, while net remittances abroad amount to as low a figure as £4 millions. Savings amount to £444 millions, while stock appreciation accounts for £58 millions. Additions to tax and dividend reserves shows a negative balance of £50 millions, the payments side thus totalling to £12,628 millions to tally with the receipts side.

The main source of income on the receipts side of the income and expenditure account for companies and public corporations is the gross trading profits amounting to £2,612 millions. The share of rent accounts for £147 millions, while interest and dividend payments plus income from abroad accounts for £592 millions, the receipts side thus totalling to £3,351 millions. The payments side, on the other hand, comprises of the interest and dividend payments plus income paid abroad, £1,041 millions; tax payments on income and national insurance contributions, £936 millions; savings, £1,146 millions, stock appreciation, £24 millions and additions to tax and dividend reserves £204 millions; and thus total to £3,351 millions.

The receipts side of the income and expenditure account of the public authorities comprises of gross trading profits of other public enterprises, £44 millions, rent, £169 millions, taxes on expenditure, £2,282 millions, current grants £137 millions, interest and dividend payments plus income earned abroad, £139 millions and tax payments on income and national insurance contributions, £2,630 millions, thus totalling up to £5,401 millions. The payments side, on the other hand, comprises of subsidies, £416 millions, current grants £962 millions, interest and dividend payments plus income paid abroad, £695 millions, current expenditure on goods and services, £2,915 millions, savings, £445 millions and stock appreciation, a negative balance of £32 millions, the total thus tallying with the receipts side total.

The value of the current income over payments to other sectors represents the sums set aside for various purposes and is transferred to the capital account of the sector denoting the economic activity of adding to wealth. We shall now present the receipts and payments sides of such accounts for 1952 for persons, companies and public corporations and for public authorities separately. On the receipts side of the capital account of persons, we have savings, £444 millions, stock appreciation £58 millions, a negative balance of £50 millions for additions to tax reserves and £64 millions as capital transfers. The item of additions to tax reserves refers to the excess of the provision made by persons for direct taxes over the amount actually paid in the year. The payments side comprises of stock appreciation, £58 millions, capital transfers, £159 millions, gross domestic capital formation, £250 millions and change in financial assets plus net overseas investment, allowing for the residual error, £49 millions, thus totalling to £516 millions. The receipts side of the capital account of companies and public corporations comprises of their savings, £1,146 millions, stock appreciation £24 millions, additions to tax and dividend reserves, £204 millions and capital transfers, £29 millions, while the payments side comprises of stock appreciation £24 millions, gross domestic capital formation, £888 millions and change in financial assets plus net overseas investment allowing for the residual error, £491 millions. Finally, the receipts side of the capital account of the public authorities comprises of savings, £445 millions, a negative balance for stock appreciation, £32 millions, and capital transfer, £177 millions, while the payments side comprises of a similar negative balance for stock appreciation, capital transfers of £93 millions, gross domestic capital formation of £793 millions and a negative balance of £264 millions for the change in the overseas assets plus net overseas investment, allowing for the residual error.

We close this presentation of the social accounts of the U.K. for 1952 by giving the receipts and the payments side of the account of the rest of the world with the U.K. The main item on the receipts side is the transactions with the rest of the world in goods and services, *i.e.*, the imports into the U.K. valued at £3,219 millions. The other items are the current grants from public authorities, £55 millions, interest and dividend payments, £356 millions, personal remittances, £4 millions, current expenditure on goods and services by persons, £128 millions, and by public authorities, £154 millions, and change in financial assets plus net overseas investment, allowing for the residual error, £291 millions. The main item on the payments side is the exports from the U.K. valued at £3,568 millions; the other items being current grants to public authorities £137 millions, interest and dividend payment plus income earned abroad, £484 millions and capital transfer £18 millions.

## THE GROSS NATIONAL PRODUCT BY INDUSTRY OF ORIGIN

During 1952, the gross national product amounted to £13,653 millions of which the net income from abroad accounted for £128 millions. This leaves the gross domestic product at factor cost to be £13,525 millions. Of this, agriculture, forestry and fishing accounted for £763 millions, while mining and quarrying accounted for £498 millions. Manufacturing, of course, took the largest share, *viz.*, £4,859 millions, followed by the distributive trades, £1,672 millions, transport and communications £1,180 millions, building and contracting £885 millions, and gas, electricity and water, £300 millions. While insurance, banking and finance including real estate amounted to £391 millions, other services accounted for £1,195 millions. Public administration and defence took away £902 millions, while £425 millions were allotted for public health and educational service.

## THE EARLIER ESTIMATES

The pioneering efforts of Prof. Bowley and Lord Stamp in this field have made it possible for us to have valuable data on the subject since 1880. The national dividend increased from £1,125 millions in 1880 to £2,165 millions in 1913. The per capita income thus rose from £33 to £47 during this period in spite of an increase in the population by more than a third. The increase was mainly gained before 1900. Since then it barely kept pace with the diminishing value of money and the progress of real wages was checked. The increase was shared with a remarkable equality among the various economic classes, *viz.*, the wage-earners, the intermediate class getting small salaries, profits or earnings in forms other than wages and the class of persons assessed to income-tax.

The aggregate income of the inhabitants rose from £2,020 millions for 1911 to £4,165 millions for 1924. If transfer incomes like Pensions and National Debt Interest are deducted from the aggregate income, we get the social income, which rose from £1,988 millions for 1911 to £3,803 millions for 1924, a rise of about 90%. As the effective rise in prices was of a similar order, the real social income was very nearly the same at the two dates. In the meanwhile, the population had increased by about seven per cent, thereby reducing the real income per head by more than six per cent. This decrease was due to the falling off of the income from abroad from £194 millions in 1911 (including South Ireland) to £156 millions in 1924 (excluding South Ireland). Home-produced income in terms of goods and services was very nearly the same in spite of increased unemployment and reduced working week. The distribution of income between wage-earners, other earners and unearned income, was changed slightly in favour of the earning classes. Manual workers, on the average, make slightly increased real earnings. Moreover, there have also been transfers for their benefit in insurance schemes and other public expenditure, and they enjoy a reduction of about one-tenth of the working-week. On the other hand, there was a reduction in the real income derived from house property and investments bearing fixed rate of interest. After full allowance is made for effects of taxation, the real income available for saving or expenditure in the hands of the rich was definitely lower in 1924 than what it was in 1911.

The White Paper entitled "An Analysis of the Sources of War Finance and Estimates of the National Income and Expenditure in 1938 and 1940" published in April, 1941, gave for the first time an official estimate of the National Income from the Income aspect in contrast to the Production aspect. The estimate for 1938 was £4,415 millions; and comprised of rents, £352 millions; profits and interest, £1,178 millions; salaries £ 980 millions; wages, £1,820 millions and other income, £85 millions. The aggregate of personal incomes available for personal expenditure and savings for 1938 was £4,148 millions. This was obtained by adding to £4,415, national debt interest, old age pensions and insurance benefits amounting to £490 millions and subtracting from the total so obtained, the direct tax liabilities, £492 millions, and the undistributed profits, investment income of charities and miscellaneous Government income amounting to £265 millions. The national income can also be expressed as the sum of expenditures. Thus, of the £4,148 millions referred to above, £3,997 millions was the amount of total personal expenditure at market prices and the balance of £151 millions was the gross personal savings. The figure £4,415 millions can also be expressed as the sum of expenditures, after adding to it £643 millions by way of indirect taxes, rates, etc., *viz.*, personal expenditure £3,997 millions, Central and Local Government expenditure, £849 millions, and the balance, of £212 millions as the net investment at home and abroad. An explanation is necessary here for adding £643 millions by way of indirect taxes, rates, etc., to £4,415 millions. It should be noted that such taxes were not included in the national income figures but they were included in the personal expenditure at market prices, *viz.*, £3,997 millions. To make the figures in the sums of expenditures comparable, therefore, an addition of indirect taxes, rates, etc., was required.

Between 1924 and 1938, the national income thus rose by about twelve per cent. Taking 1924, as the base year, the index number of prices, however, declined by nine per cent and the index numbers of quantity of production rose by twenty-three per cent. Even allowing for the increase in population of over five per cent, the quantity index did rise by over sixteen per cent; the real wages also recorded a rise of about six per cent.[1]

Taking 1948 prices as the base, the index of the gross domestic expenditure at factor cost rose from 96.1 in 1946 to 110.9 in 1952. This rise measures the progress made by the economy during the post-war period.

---

[1] pp. 192-193. Studies in the National Income, 1924-1938; Edited by Prof. Bowley.

## INDIA

The difficulties in the way of a satisfactory estimation and analysis of the national income in India are indeed great. The First Report of the National Income Committee, April, 1951, provides us with the latest data available on the subject. To arrive at the figure of the national income, we have to calculate the value of the output in different sectors of the economy. This is done on the assumption that the bulk of the goods and services produced are exchangeable for money. In India, however, such an assumption would not be a correct one as a considerable portion of the output is either consumed by the producers themselves or is bartered for other goods and services. Further, many producers have no clear idea of either the quality or the value of the output they produce. As the major portion of the economy consists of household enterprises, which perform a variety of functions which would normally fall under different and distinct industrial categories, it is not possible to classify the national income by industrial origin of the customary type. The paucity of adequate statistical data is another very serious handicap. It is not thus possible to use either the 'inventory' or the 'income' method to cover the entire range of the economy. The National Income Committee has adopted the former method to evaluate the net output of three sectors in the economy, *viz.*, exploitation of animals and vegetation, including animal husbandry and fishing, exploitation of minerals; and industry. The other six sectors, *viz.*, transport, trade, public force, public administration, professions, and liberal arts and domestic service, were dealt with on the basis of the 'income' method.

The net domestic product at factor cost for 1948-49 was estimated by the National Income Committee to be Rs. 87.3 abja, while the net earned income from abroad was estimated to give a negative balance of Rs. 0.2 abja, thus leading to the figure of Rs. 87.1 abja as the net national output at factor cost or the national income. The per capita income works out at Rs. 255. While agriculture, animal husbandry and ancillary activities accounted for 46.7% of the national income, forestry and fishery accounted for 0.7% and 0.2% respectively. Commerce, transport and communications accounted for 19.5%, a significant contribution especially as a large part of the commodity production does not enter into trade at all. Mining, manufacturing and hand-trades accounted for 17.2%, while the other services contributed 15.9%. The latter include professions and liberal arts, government services, domestic service and house property.

The relative importance of the small or household enterprises in our economy is made quite clear from the fact that the contribution of such enterprises to the net domestic product is 83.6%, while that of the larger corporate establishments is just 16.4%. In calculating these proportions, the share of the government services, house property and 'other commerce and transport' has been excluded as these form the unclassified items. Their share in the net domestic product has been 5.3, 5.2 and 16.3 per cent, respectively; and even if they are included, the share of the small enterprises remains as high as 61% of the net domestic product.

Treating each working dependant as equivalent to a principal earner and omitting completely the subsidiary workers, the net output per engaged person in the country for 1948-49 was estimated to be valued at Rs. 660. Treating a working dependant as equivalent to half of the principal earner, it was valued at Rs. 730. The latter procedure can be justified for a variety of reasons. The working dependants occur largely in the agricultural sector; there is a preponderance of women among them who may be working only a part of their time. Further, it would be reasonable to, make such an assumption in respect of children below 14 years of age, described as working dependants. On the basis of the latter, the net output per engaged person in agriculture was valued at about Rs. 500; for mining and factory establishments the corresponding figure was Rs. 1,900. For railways and communications, it was as high as Rs. 2100, while for banking, insurance and other commerce and transport it was Rs. 1600. The figure for Government services was also a high one being Rs. 1300 but it was rather low for professions and liberal arts, *viz.*, Rs. 700. Agriculture is characterised by a very low value of its net output. Heavy capitalisation has resulted in a higher net output in railways and communications. It should, however, be noted that these values of net output do not represent the productivity per worker of each sector as non-working proprietors have also been included in the numbers engaged in each sector. They also do not represent the average earnings per engaged person as certain income payments like interest may conceivably go to persons outside the sector. In the Government sector, it is assumed that the value of the output is equal to the cost of the services.

It is not possible at present to prepare a complete set of social accounts for India as reliable information is not available on certain important items such as the provision for depreciation, capital formation, savings in the private sector and consumers' current expenditure.

## THE EARLIER ESTIMATES

The earliest estimate of per capita income of Rs. 20 for 1868 was made by Dr. Dadabhai Naoroji. For 1897-98, Lord Curzon estimated it to be Rs. 30. The estimate by Prof. Vakil and Dr. Muranjan for 1910-14 was Rs. 58.5. For 1921, Findlay Shirras gave the figure to be Rs. 107 while for the same year the estimate by Prof. K. T. Shah and Mr. Khambatta was Rs. 74. For 1931-32, Dr. V.K.R.V. Rao estimated it to be Rs. 65 with a margin of error of six per cent on either side. His estimate of the net income of British India for 1931-32 was Rs. 1766.4 crores. The different estimates are not comparable on account of the difference in the levels of prices and on account of the different bases of estimation adopted.

Dr. Rao used the 'inventory' method for agriculture, pasture, mines, forests, fishing and hunting and the 'income' method for industry, trade, transport, public force and administration, professions and liberal arts and domestic service. The 'inventory' or the 'census' method consists in the evaluation of the goods and services accruing, while the 'income' method consists in a summation of individual incomes.

Of the total income for 1931-32, 52.8% was accounted for by the sector of agriculture, pasture, hunting and fishing, while industry accounted for 16.9% of the income. Services including trade, transport, Government professions and domestic services accounted for 22.6% of the total income. For the sector of agriculture, the income per occupied person was Rs. 133, while that for industry was Rs. 195. For services, the corresponding figure was the highest being Rs. 307.

For 1931-32, the per capita income in rural areas was Rs. 51, while it was Rs. 166 in urban areas, more than thrice that in rural areas. In the urban classes, nearly one-half of the total income belonged to less than one-tenth of their total number. That indicates the extent of uneven distribution of income in the country.

## Appendix A

### INDIA'S NATIONAL INCOME[1]

Estimates of India's national income in the years 1948-49, 1949-50 and 1950-51 are given in the final report of the Indian National Income Committee set up in 1949.

---

[1] Reproduced from Commonwealth Survey, 30-4-54, Central Office of Information, London.

National income, as measured by net domestic product at factor cost, is estimated to have risen, in money terms from Rs. 8,670 in 1948-49, to Rs. 9,550 crores in 1950-51. During this period the population increased in numbers from 350.58 million to 359.33 million, and income per head rose therefore from Rs. 246.9 to Rs. 265.2. As, however, prices rose considerably over the period, there was no rise in real income per head.

Of the total of Rs. 9,550 crores in 1950-51, the private sector of the economy contributed Rs. 8,830 crores or 93 per cent; while Government enterprises contributed about 2 per cent and Government administration about 3 per cent. On the expenditure side, the Government share amounted to about 8.5 per cent of net national expenditure at market prices.

The contributions of the different sections of the national economy are estimated as follows :

### TABLE I

### India's National Income

(*Rupees crores*)

| Section of the Economy | 1950-51 | 1949-50 | 1948-49 |
|---|---|---|---|
| Agriculture ... | 4,890 | 4,490 | 4,250 |
| Mining and manufacture ... | 1,530 | 1,500 | 1,480 |
| Commerce, transport and communications ... | 1,690 | 1,660 | 1,600 |
| Other services ... | 1,440 | 1,380 | 1,340 |
| Total National Income ... | 9,550 | 9,030 | 8,670 |

In 1950-51, agriculture contributed 51 per cent of the total, while the share of mining and manufacture was 16 per cent. Table II gives a more detailed analysis.

## WORKING POPULATION

Out of a total working force in 1950-51 of 143.2 million, 72 per cent were estimated to have been engaged in agriculture, forestry and fishery. About 11 per cent were employed in mining and manufacturing, while the remaining 17 per cent were employed in commerce, transport, communications and other services.

Table III gives the distribution of the labour force by industries.

### TABLE III

### DISTRIBUTION OF WORKING FORCE BY INDUSTRIES

(*thousands*)

| Industry | 1950-51 | 1949-50 | 1948-49 |
|---|---|---|---|
| Agriculture and animal husbandry | 102,711 | 101,135 | 99,591 |
| Forestry ... | 350 | 349 | 348 |
| Fishery ... ... | 579 | 578 | 577 |
| TOTAL ... | 103,640 | 102,062 | 100,516 |
| Mining ... ... ... | 780 | 778 | 777 |
| Factory establishments ... | 2,969 | 3,070 | 3,065 |
| Small enterprises ... ... | 11,521 | 11,323 | 11,230 |
| TOTAL ... | 15,270 | 15,171 | 15,072 |
| Communications ... ... | 195 | 175 | 169 |
| Railways ... ... ... | 1,178 | 1,181 | 1,192 |
| Banks and insurance ... ... | 147 | 147 | 147 |
| Other commerce and transport ... | 9,553 | 9,437 | 9,343 |
| TOTAL ... | 11,053 | 10,940 | 10,851 |
| Professions and liberal arts ... | 6,425 | 6,191 | 6,016 |
| Government administration ... | 3,886 | 3,765 | 3,597 |
| Domestic service ... ... | 2,947 | 2,847 | 2,751 |
| TOTAL ... | 13,258 | 12,803 | 12,364 |
| TOTAL WORKING FORCE ... | 143,221 | 140,976 | 138,803 |

### TABLE II

### INDIA'S NATIONAL INCOME BY INDUSTRIAL ORIGIN

*(Net output in abja rupees)*

| Item | 1950-51 | 1949-50 | 1948-49 |
|---|---|---|---|
| **Agriculture:** | | | |
| Agriculture, animal husbandry and ancillary activities ... | 47.8 | 43.8 | 41.6 |
| Foresty ... ... ... | 0.7 | 0.7 | 0.6 |
| Fishery ... ... ... | 0.4 | 0.4 | 0.3 |
| Total of Agriculture | 48.9 | 44.9 | 42.5 |
| **Mining, Manufacturing and Hand Trades:** | | | |
| Mining ... ... ... | 0.7 | 0.6 | 0.6 |
| Factory establishments ... | 5.5 | 5.4 | 5.5 |
| Small enterprises ... ... | 9.1 | 9.0 | 8.7 |
| Total of mining, manufacturing and hand trades ... | 15.3 | 15.0 | 14.8 |
| **Commerce, transport and communications:** | | | |
| Communications (Post and Telegraph) ... ... | 0.4 | 0.3 | 0.3 |
| Railways ... ... ... | 1.8 | 1.8 | 1.7 |
| Organized banking and insurance | 0.7 | 0.6 | 0.5 |
| Other commerce and transport | 14.0 | 13.9 | 13.5 |
| Total of commerce, transport and communications ... | 16.9 | 16.6 | 16.0 |
| **Other Services:** | | | |
| Professions and liberal arts ... | 4.7 | 4.5 | 4.3 |
| Government services (administration) ... ... ... | 4.3 | 4.1 | 4.0 |
| Domestic service ... ... | 1.3 | 1.2 | 1.2 |
| House property ... ... | 4.1 | 4.0 | 3.9 |
| Total of other services ... | 14.4 | 13.8 | 13.4 |
| Net domestic product at factor cost | 95.5 | 90.3 | 86.7 |
| Net earned income from abroad | - 0.2 | - 0.2 | - 0.2 |
| NET NATIONAL OUTPUT AT FACTOR COST | 95.3 | 90.1 | 86.5 |

**N.B. abja 100=crores=1,000 million.**

## Appendix B

As we go to the press, the first issue of the annual paper on national income published by the Central Statistical Organisation is out. The national Income Unit of the Ministry of Finance was merged last June with the Central Statistical Organisation.

This paper shows India's national income at Rs. 9,990 crores for 1951–52 showing an increase of Rs. 460 crores over the previous year. The per capita income at current prices was thus Rs 274·5, a rise of 3·5 per cent over 1950–51. In real terms or at constant prices, this rise in per capita income is, however, reduced to 2·2 per cent.

The estimates for 1951–52 indicate a small increase in income in the agricultural sector, but a larger increase in factory establishments over the figure for the previous year. The contribution by the railways shows a rise as compared with a steady level in three previous years. There has also been a rise in "other commerce and transport". The contributions made by the Government or the public authorities sector maintains a progressive increase.

## RUSSIA

The problem of the measurement of the real national income in Soviet Russia during the last four decades has been a complicated one. The official statistics have 1926-27 as their base year. In that year, certain manufactured goods were sold in small quantities but at very high prices; in later years, however, these goods showed a rapid expansion of production. The continuation of 1926-27 as the base year, therefore, gives a very upward bias to the figures of national income. The rapid rise in money wages and prices during this period and the rise in the cost of production of certain commodities on account of the virtual exclusion of imports are the other factors that make it difficult to measure the real national income. The levying of the turnover tax and the requisitioning of a substantial proportion of the agricultural output by the Government also made comparisons of the figures of the national income between earlier and later periods more difficult.

For 1913, Prof. Prokopovitch has calculated the national income excluding depreciation, to be 13.06 milliard roubles; of this agriculture and fishing accounted for 7.5 milliard roubles. For 1927-28, his estimate was 23.8 milliard roubles, agriculture and fishing contributing 10.6 milliard roubles of the same. The official statistics give the income to be 45.5 milliard roubles in 1932, 128.3 milliard roubles in 1940 and 174.5 milliard roubles in 1949. These figures are, however, based on 1926-27 prices and show, for reasons already referred to, a marked upward bias. Colin Clark has calculated the real national income of Soviet Russia in International Units. An International Unit is taken as the quantity of commodities exchangeable for $1 in the U.S.A. over the average of the period 1925-34. For 1913, the real national income of Soviet Russia was 18.11 milliard International Units; it rose to 27.6 milliard International Units in 1940, an increase of about fifty per cent.

The range of services included in the national income is narrower than in other countries. Is is, therefore, sometimes said that the national income is confined to material production. During the thirties, for example, incomes of professional workers from private practice, the armed forces and passenger transport were ignored. They were estimated to constitute about ten per cent of personal incomes.

It is necessary to include in the national income the turnover tax for two good reasons. It is a measure of services supplied gratis by the state, though it would be admitted that it is scarcely an adequate measure especially of changes over time. What is, however, much more important to note is the fact that the exclusion of the tax would result in giving the figure of the national income virtually at prime cost. This would obviously not be comparable with the previous data on the subject in the country or with similar estimates in foreign countries.

## NATIONAL INCOME AND THE FIVE YEAR PLANS

Prior to 1917, Russia was a country with a small national income per head and a low standard of life. The basic reason for the lowness of the average standard was the low productivity of agriculture, which constituted the livelihood of four-fifths of her population. According to the estimate of Prof. Prokopovitch, the per capita national income was about 102 roubles a year, which was then about a third that of Germany and a quarter that of England. Industry was relatively backward, more attention being paid to rare and precious metals for export than to raw materials required by modern industry. The country remained overwhelmingly dependent on imports for the supply of an extensive range of both capital goods and consumers' goods. The twenties and the thirties of the present century witnessed a rapid growth of production both industrial as well as agricultural. Over the five years of the First Five Year Plan, the net amount to be invested in the economy was set at a figure of between a quarter and a third of the national income. It is often supposed that this high rate of investment was designed at the expense of an absolute fall in consumption. In fact, however, the original design was to raise the latter in absolute terms by as much as 75%. A fall in retail prices to the extent of 20% was also budgeted for. So far as consumption was concerned, things did not work out according to these preliminary estimates largely on account of certain unfavourable factors, which could not have been foreseen when the plan was designed. The large-scale slaughter of livestock as a reaction of the peasantry and particularly of the Kulak elements to the collectivisation campaign was one such unfavourable factor. It had disastrous effects on the animal power available to agriculture, the manuring of land and above all on the supplies of meat and dairy products during the year that followed. The other unfavourable event was the Great World Depression of the early thirties which resulted in worsening the terms of trade for the country and thereby reduced her import capacity.

Under the Second Five Year Plan, the proportion of the national income devoted to investment was to fall from 24% in the final year of the First Plan to 19½% in the last year of the Second Plan. Though priority was assigned to the heavy industries, increasing attention was paid to the development of light and consumers' goods industries for which an increased amount of capital investment was allotted. The Third Plan was disturbed by the outbreak of the war. In 1940, the allocations for defence from the budget were double the figure for 1938 and in 1941, they were, in fact, trebled. In the former year, investment and defence accounted for as high a proportion as fifty per cent of the national income. In spite of these difficulties, it has been estimated that during the first three years of the Third Plan, the national income rose by about thirty per cent. For the final year of the Fourth Five Year Plan, *viz.*, 1950, the amount of net investment has been estimated to be about 27% of the national income. Of this, 6% was to be devoted to the "building up of reserves". This compares with "rather more than a quarter of the national income", devoted to net investment "including reserves" on the average of the period from 1928 up to the war.[1]

---

[1] p. 305, Soviet Economic Development since 1917, By Maurice Dobb.

## JAPAN

The publications of the Economic Counsel Board of the Japanese Government on 'National Income Statistics of Japan' provide us up-to-date data on the subject. For 1951, the national income of Japan amounted to 4,849 billion yen; for 1934-36, the annual average was 14.5 billion yen. This violent rise is due to a similar rise in the price index which during this period rose by 288 times, the rise in the national income figure being 334 times. The real national income derived after making an allowance for this rise in price index was 16.8 billion yen for 1951, a rise of sixteen per cent over the 1934-36 figure. In the meanwhile, however, the population increased from 68.64 millions to 84.55 millions, a rise of about twenty-three per cent. We thus find that the per capita income of 211 yen for 1934-36 dropped to 199 yen for 1951, a decline of nearly six per cent.

Of the total national income for 1951, agriculture, forestry and aquatics accounted for 22%, mining, manufacturing and construction, 33% and transport, communication, trade and services for the remainder, *viz.*, 45%; the corresponding percentages for 1934-36 were 20, 29 and 51, respectively. The period thus records a decline in the contribution by the tertiary group in favour of the primary and the manufacturing industries.

Of the total income for 1951, the compensation of employees accounted for 44%, the proprietors' income, 43% and the corporate profits, rental income and interest income for the remainder. Of the gross national expenditure of 5,325 billion yen for 1951, personal consumption expenditure accounted for 59.7%, gross domestic capital formation for 20.9%, Government purchases of goods and services for 17.6% and net foreign investment for 1.8%.

Taking 1934 prices as the base, Colin Clark has estimated the national income to be4.0 billion yen for 1914, 4.2 billion yen for 1918, 10.6, billion yen for 1928 and 14.16 billion yen for 1934. The figures indicate a slow rise during the period of the first World War, more than doubling of the income during the ten years following the war period, and a fair rise thereafter in spite of the world depression.

## GERMANY

Colin Clark has adjusted the available data pertaining to Germany for international comparability. The figures of the national income at market price, after being duly adjusted, show a continuous rise from 47.85 milliard marks in 1913 to 82.9 milliard marks in 1928 when its progress was checked by the forces of depression. In fact, it recorded a decline to 54.7 milliard marks in 1933 but showed signs of recovery thereafter and reached 86.1 milliard marks in 1937. The years of the second World War witnessed a further rise in the national income to 145 milliard marks in 1944. In terms of, International Units as defined by Colin Clark, the period records a rise from 18.80 milliards in 1913 to 47.9 milliards in 1944. This is due to the almost continuous rise in the average product per man-hour in International Units from .319 in 1913 to .379 in 1934 and .487 in 1944. The highest productivity is, of course, recorded in the tertiary industries, the lowest being in the primary industries. In the tertiary industries sector, the product per man-hour in International Units rose from .328 for 1911-13 to .448 in 1934-35; the corresponding figures for the manufacturing industries sector were .3 and .378, respectively. In the primary industries sector the product per man-hour was the lowest, being .116 for 1911-13 and .159 in 1934-35. A steady downward tendency is noticeable in Germany in the proportion of labour engaged in primary and secondary production; in the tertiary sector, on the other hand, a rise is recorded. We thus notice a decline in the proportion engaged in primary production from 23.8% in 1907 to 16.9% in 1933; in manufacturing industry a decline from 50.6% to 47.4%; but in the tertiary industry a rise from 25.6% to 35.7%.

## INTERNATIONAL COMPARISONS

No wholly satisfactory method is available for this purpose. The pioneering work of Colin Clark, however, enables us to draw certain conclusions within certain limitations. He has taken the standard of comparison of purchasing power as the quantity of commodities exchangeable for $ 1 in the U.S.A. over the average of the period 1925-34 and termed it as the International Unit. The product per man-hour in International Units can be then used for purposes of comparison. In 1947, it was 1.186 for the U.S.A. and .588 for Great Britain. In 1944, it was .487, .181 and .094 for Germany, Japan and India, respectively, while it was .178 for Soviet Russia in 1940. On account of the greater development of the manufacturing and the tertiary industries in the U.S.A., Great Britain and Germany, the product per man-hour is higher, while the greater emphasis on the primary industry in Japan, Russia and India has resulted in a comparatively low figure for the same in these countries. In 1940, the proportion of labour engaged in the primary industry in the U.S.A. was 19.3%, while it was 31.2% and 49.5%, respectively for the secondary and the tertiary industries. For the U.K. the corresponding percentages were 7.1, 46.3 and 46.6, respectively in 1938, while for Germany they were 16.9, 47.4 and 35.7, respectively in 1933. In Japan, there has been a greater emphasis on the primary industry and the corresponding percentages were 36.2, 25 and 38.8, respectively in 1930. In India, the emphasis on the primary industry is the greatest, the percentage for it in 1951 being as high as 70 while those for the secondary and the tertiary industries were 10 and 20, respectively.

## SELECTED BIBLIOGRAPHY

1. Income and Wealth of the United States. Trends & Structure. Income and Wealth Series II—Edited by Simon Kuznets.
2. National Income and Expenditure : 1946-51 and 1946-52; Central Statistical Office, H.M.S.O., London.
3. Three Studies on the National Income by Prof. Bowley and Sir Josiah Stamp.
4. Studies in the National Income, 1924-38, Edited by Prof. Bowley.
5. The First Report of the National Income Committee, 1951, Ministry of Finance, Government of India.
6. The National Income of British India, 1931-32. by Dr. V.K. R.V. Rao.
7. Soviet Economic Development since 1917 by Maurice Dobb.
8. National Income Statistics of Japan, Economic Counsel Board, Japanese Government.
9. The Conditions of Economic Progress by Colin Clark.

### APPENDIX C

# CERTAIN ASPECTS OF PAKISTAN'S ECONOMY

## THE AGRARIAN PROBLEM

Agriculture is the mainstay of Pakistan's economy ; the rural population constitutes the bulk of the consumers ; agricultural products provide raw material for the major industries in the country as well as form the main source of foreign exchange earnings. The agricultural sector of the economy has, however, been characterised by low yields, unemployment and under-employment, and inadequate finance. The pressure of population on land has forced the farmer to bring marginal and submarginal lands under cultivation ; that the forest area has been reduced to as low a percentage as four of the total area is an evidence of such a pressure ; for, a forest area covering over one-fifth of the total area is regarded as a healthy requisite. The excessive subdivision and fragmentation of holdings has aggravated the problem. The fate of the farmer is linked up with the vagaries of the monsoon and the land is starved of humus as farm manure is burnt as fuel on account of its chronic shortage.

The Ministry of Food and Agriculture gives the total cultivated area for West Pakistan in 1948 to be 39 million acres, the uncultivated land excluding current fallow being given as 19 million acres; the corresponding figures for East Pakistan are 22.1 and 4.2 millions, respectively. These data indicate that in West Pakistan the potentialities of bringing new land under cultivation are brighter than those in East Pakistan ; to realise this potential, adequate irrigation facilities will, however, have to be provided. In respect of double-cropping, on the other hand, the potentialities in East Pakistan are very large, for, here the land is very fertile and the water resources abundant. The data provided by the Ministry of Food and Agriculture show that out of the total double-cropped area of 8.1 million acres in Pakistan, as many as 5.7 millions are in East Pakistan. West Pakistan has to face a serious problem caused by soil erosion, water-logging and salinity ; it is estimated that well over ten million acres of land have been thus rendered unfit for cultivation in the course of a few years. Similar is the result of the rain water floods and the overflow of water caused by the silting up of river beds and channels in East Pakistan.

Food crops account for nearly ninety per cent of the cultivated area, cotton for about six per cent and jute about four. Rice and wheat are the most important foodgrains produced ; rice forms the staple diet in East Pakistan and wheat in West Pakistan. Before partition, the areas now forming West Pakistan were known as the granary of the sub-continent ; Pakistan should, therefore, be a surplus country. After partition, however, the agriculturist refugees took some time to get used to the new conditions ; imports of foodgrains were thus necessitated in 1948 and 1949. In 1950 and 1951, however, a recovery was made and exports of foodgrains to the tune of two hundred thousand tons could be arranged. The failure of monsoons in 1951 together with the locust wave in 1952 resulted in a deterioration in the food situation ; the annual production of foodgrains dropped from 14.0 million tons in 1950-51 to 12.3 millions in 1951-52. In 1952, imports of well over three hundred thousand tons of foodgrains had to be arranged and a Grow More Food Conference was convened. Among the short-term measures recommended by the Conference are the supply of chemical fertilisers at subsidized rates, the restoration of land to wheat, the maximisation of canal water supplies, double-cropping, distribution of seed at concessional prices and remission of land revenue and reduction in water rate for new lands brought under cultivation. On the basis of an average daily ration of 16 ounces per capita mentioned in the Six-Year Plan, the requirements for a population of 76.0 millions will be 12.4 million tons ; this, however, refers to the population in 1951 ; by 1957, the population is expected to rise to 81 millions and the requirements would increase to 13.2 million tons. The Grow More Food Conference has recommended an increase in the production of foodgrains by 3.2 million tons by 1956-57 over the 1951-52 level. If this target is achieved, it would fulfil a three-fold purpose ; it would cover the deficit expected ; it would provide against lean years and finally, it would leave some surplus for export. Of the non-food crops, the most important are jute and cotton ; the Six-Year Plan laid down a target of 6.6 million bales for jute and 1.5 million bales for cotton by 1957. Both these targets have been exceeded in 1952-53 when the production of jute was 6.8 million bales and the estimated production of cotton was 1.75 million bales. The Economic Appraisal Committee of 1953 has suggested that the production target for jute should be 6 million bales by 1957, the basis for the suggestion being the assumption of the local consumption of one million bales and the external demand of five million bales. In respect of the target for the production of cotton, the Committee suggests that the production should be equal to the local consumption from year to year plus exports at the level of 1.4 million bales.

The serious underemployment in rural areas weakens the agricultural sector of the country's economy. In East Pakistan, for example, 9.4 million male cultivators have on an average per head only 2.8 acres of crop land taking into account the land double-cropped. Assuming 2500 man-hours of work per year per male cultivator to represent reasonably full employment, roughly four acres of rice land would be needed for cultivation ; the East Pakistan average, however, falls much below the required mark denoting the presence of serious underemployment and every addition to the present population would mean a further deterioration in the situation. In West Pakistan, on the other hand, as Mr. Colin Clark has pointed out in his report to the Government, the probable practical limit of cultivation would provide full employment for 7.3 million cultivators ; he has made an assessment of the total water available through existing or future schemes of development in arriving at this conclusion. The number of cultivators in West Pakistan in 1951was 5.7 millions ; on the assumption made by Mr. Colin Clark, therefore, West Pakistan can provide for another 1.6 millions. Consequent to the growth in population, provision for employment to the additional numbers will have to be sought for in the agricultural sector of the economy and not in the industrial sector ; for, as the Report of the Agricultural Enquiry Committee of 1952 points out even if all the industries contemplated in the Six-Year Plan were completed they would give employment only to about three hundred thousand workers over the entire period of the Plan. Between 1951 and 1961, however, a yearly addition of three hundred thousand to the labour force is anticipated ; it would thus be seen that over the entire period of the Plan only a year's addition to the labour force would be provided with employment, the additions to the labour force during the remaining years of the Plan being required to be provided for in the agricultural sector.

The agriculturist is handicapped by inadequate finance. Private money lending is controlled by legislation and has suffered a setback with the departure of *mahajans* after partition. In the absence of licensed warehouses, the agriculturist can derive little help from the commercial banks which insist on the security of agricultural produce before advancing a loan. Even the co-operative banks, essentially meant for extension of credit facilities to the agriculturist, allow their funds to be diverted from agricultural credit to commercial and industrial enterprise. The procedural difficulties which characterise government finance have made it unpopular ; moreover, it is only in a period of emergency like famine or flood that the Government releases substantial funds for this purpose. The need to provide adequate finance to the agriculturist is thus an urgent one. An agriculturist needs short-term finance at the time of sowing, harvesting and marketing and long-term finance for the purpose of land improvement. To provide the former type of finance, the Agricultural Enquiry Committee of 1952 suggested the formation of the multipurpose co-operative societies and the pilot agricultural banks sponsored by the State Bank of Pakistan ; to provide the latter type of finance, the same Committee suggested two agencies, firstly, the Provincial Governments acting through Agriculture Departments and secondly, the Agricultural Finance Corporation acting through its own offices in the Provinces or through the co-operative societies. The Economic Appraisal Committee of 1953 is of the opinion that the multipurpose co-operative societies and the pilot agricultural banks, particularly the latter, should be utilised for long-term finance also ; this Committee also feels that the Agricultural Finance Corporation should finance the agricultural banks as well as the multipurpose societies for the purpose of long-term loans but should not normally advance loans directly to the small cultivators. With the development and extension of the two agencies, the multipurpose co-operative societies and the agricultural banks, the need for Government assistance should gradually disappear. The Economic Appraisal Committee of 1953 has further recommended that the Khaikhalashi banks should, to start with, be established in selected areas in East Bengal where the extent of Khaikhalashi transactions is substantial. The object in the establishment of these mortgage banks is to prevent the present exploitation of the cultivators by the moneylenders. Under the Khaikhalashi system which prevails in East Bengal, the cultivator who has borrowed a loan from the moneylender makes over to the latter his cultivable land for a specified period under a usufructuary mortgage deed, *i.e.*, authorising full use of the land and its proceeds. The moneylender is thus entitled to use the land and its proceeds during the specified period and return it to the owner at the end of the period without any encumbrances ; during this period, the cultivator might be employed by the moneylender as an agricultural labourer or *bagadar*. The Khaikhalashi mortgage banks recommended by the Committee would lend money to the cultivators on a similar basis with, however, one major difference ; they would charge to the account of the cultivator only 6¼ per cent per annum of the loan plus overhead costs and would place the balance of the income from the land during the period specified to the credit of the cultivator.

We may conclude this section by referring to the schemes of agricultural development approved for execution. The Ganges-Kobadak Scheme, the Lower Sind Barrage Project and the Thal Project stand out as conspicuous by virtue of the large additional acreage to be irrigated by them, the exact figures of this acreage being 1.8, 1.6 and 1.5 million acres, respectively for them. The Ganges-Kobadak Scheme which is a part of the huge multipurpose scheme, the Brahmaputra Project, a long-term scheme covering a period of 30 years, provides for the construction of a pumping station to pump water from the Ganges and the excavation of a distribution canal out of old river beds. The Scheme is estimated to cost Rs. 19 crores. The Lower Sind Barrage Project is to be completed in two phases ; in the first phase already completed in 1954, the head works, the feeders and other new channels were constructed and in the second phase, to be completed by 1960, the existing channels will be remodelled and extended. The estimated cost of the Project is Rs. 24 crores. The Thal Project consists of three phases, irrigation, colonisation and road construction and is to cost Rs. 37 crores. The irrigation phase has been practically completed. The Thal area covers about 5 million acres of land ; this Project, however, aims at developing only 2.2 million acres, of which 1.5 million acres will be cultivable. Among the other schemes mention may be made of the Taunsa Barrage estimated to cost Rs. 10 crores and to provide irrigation to additional .6 million acres; and of the Nari-Bolan, Sailaba Cultivation, Tank-zam-Gomal and Kurram-Garhi Projects. Each of the latter four is expected to provide irrigation facilities to well over a hundred thousand additional acres of land. Of special significance are the Lift Irrigation Project and the Mechanical Cultivation Project in East Pakistan; the former provides for the installation of five hundred power pumps over a period of five years in order to provide irrigation water during the dry season, while the latter provides for the acquisition of 450 tractors over a period of five years for use in areas requiring quick cultivation during the non-flood season and for reclamation of lands in the Chittagong Hill Tracts.

## THE INDUSTRIAL SECTOR

The development of the industrial sector has been handicapped by several factors the chief among them being the difficulties experienced in the procurement of capital goods and essential raw materials, the shortage of trained personnel, the presence of foreign competition and the slow progress on the part of the private enterprise. As per the industrial policy of the Government declared in 1948, this sector was to be the sole concern of the private enterprise with the exception of a few specified industries. As the response from the private enterprise was not as satisfactory as it should have been, the Government had to step into the field and set up the Pakistan Industrial Development Corporation in 1952 to start certain essential industries. As early as 1949, the Government had established an Industrial Finance Corporation; the Corporation aims at providing finance to public limited companies, co-operative societies, partnerships as well as individuals in the form of medium and long-term loans. The slow progress of the private enterprise is partly accounted for by the absence of an industrial tradition; prior to partition, Muslims were mostly engaged in trade. Even the taxation and other concessions granted to industries in the fiscal year 1952-53 did not prove to be sufficient enough to attract the capital needed. In this connection, the Economic Appraisal Committee of 1953 commend the suggestion made by Mr. Colin Clark that income-tax should cease to be a tax on income and become a tax on spending. The Committee has recommended three measures to promote investment in the industrial sector : firstly, exemption from taxation up to 20 per cent of the total income should be given by the Government to investors in the share capital of approved public companies ; secondly, in the case of income groups up to Rs. 25,000 per annum, the option should be given that a rebate on income-tax may be claimed up to a maximum of 50 per cent of the amount payable provided the investment made is double the amount of rebate sought and finally, the investment enabling relief should include Government securities and savings certificates in addition to the approved investment of 'initial share capital taken up in an approved public company incorporated in Pakistan and formed for the purpose of engaging in an industrial undertaking'.

The indigenous industry which finds it difficult to secure capital goods and essential raw materials in time and suffers from the shortage of trained personnel is more often than not unable to face foreign competition. The Pakistan Tariff Commission set up in 1950 has already helped to secure some measure of protection for certain industries ; Government purchases of indigenous products would further encourage home production. The Economic Appraisal Committee of 1953 recommend that the tariff inequities wherever prevailing should be removed and that the sales tax payable on imported industrial raw materials should be abolished whenever possible. The former recommendation would mean that in no case should the import duty on manufactured goods be lower than the rates for the component raw materials keeping in view their contribution to cost ; the latter recommendation is aimed at enabling the home industry to secure raw materials at a lower price. With a view to conserve foreign exchange, the Government follows the policy of restricting the imports of a number of articles which are locally produced. A campaign to patronise Pakistan products has already been launched by the Government ; the success of such a campaign, however, ultimately rests on the improvement of the quality of the home product which alone is the best protection against foreign competition. There is also the need of expanding home production and of reducing the costs ; this in fact is the crux of the problem.

Cottage and small-scale industries occupy a place of special importance in the economy of the country ; the cost of investment required per capita in cottage industry is very small compared with that in large-scale industry ; the same amount of investment in the former, therefore, enables the absorption of a larger labour force than is feasible in large-scale industry. Handloom is the most important cottage industry, the total number of handlooms in the country being about half a million. The industry suffers from shortage of yarn ; further, with the departure of the non-Muslim *mahajans* and the Hindu middlemen after partition, the cottage industries are left with no dependable source of finance as well as of assistance in the securing of raw materials and in the marketing of finished products. Inadequate supplies of power are a further handicap ; the experience of Japan shows that if cottage industries are suitably mechanised and provided with power they can by themselves meet the several requirements of consumer goods and even help the big industries in providing component parts. As things stand at present, however, the cottage industries prove to be uneconomical and hence unable to compete with large-scale industry. The installed capacity of electric power in the country rose from 74 thousand k.w. in 1947 to 125 thousand k.w. in 1952 ; most of this increase is due to schemes started before partition. By 1957, the three major hydro-electric projects approved by the Government, *viz.*, Karnafulli in East Pakistan and Mianwali and Warsak in West Pakistan, are expected to produce 335 thousand k.w., the hydro-electric power can be produced in much larger quantities and at a cheaper cost than the thermal power and is, therefore, far more important than the latter. Until the hydro-electric power is developed, coal and oil would occupy an important position ; within five years after partition, the production of the former was stepped up from .3 to .6 million tons, the target under the Six-Year Plan being ·8 million tons; during the same period, the production of crude oil rose from 57 to 200 thousand tons, nearly one-eighth of the country's requirements of refined products being satisfied by the home production.

A review of the progress made in the field of industry during the period 1947-52 and of the targets laid down in the Six-Year Plan for certain important industries may now be made. Despite the aforesaid handicaps, good progress has been recorded in this field. At the time of the partition, the country did not have a single jute manufacturing concern ; during the period under review, however, the Pakistan Industrial Development Corporation collaborated with a private firm to establish three mills of one thousand looms each. By 1952, the total investment involved in the jute industry was about Rs. 17 crores, of which the Government share was about rupees six crores. The Six-Year Plan has laid down the target of six thousand looms ; on a two-shift basis, their production will be about 240 thousand tons, while the home requirements are estimated at 35 thousand tons leaving a substantial surplus for export. The period under review saw a rise in the annual production of cotton cloth from 74 to 118 thousand bales ; the installed capacity for cotton textiles which was 117 thousand spindles and 4.8 thousand looms at the beginning of the period rose to 391 and 8.6 thousands, respectively, at the end of the period. By 1952, 689 thousand spindles were under installation, while another 278 thousands were already booked or authorised for being installed ; the corresponding figures for looms in the year were 5.5 and 8.7 thousands, respectively. The total number of spindles in actual operation, under installation and authorised in 1952 thus came to 1.36 millions, exceeding the target of one million laid down in the Six-Year Plan ; the corresponding figure for looms in 1952 was 22.8 thousands. If the spindles and looms under installation and authorised in 1952 come into actual operation, the home production will be 513 thousand bales of cloth with 437 thousand bales of surplus yarn. If the production of handlooms, which would be over half of that of textile mills, is taken into account, provision to the extent of 16 yards of cloth per capita can be made; to achieve this objective it is, however, necessary to make arrangements for the provision of the surplus yarn to the handloom industry. There was no production of woollen textiles at the time of the partition ; the target indicated in the Six-Year Plan is 20 thousand worsted spindles and 24 thousand spindles for hosiery and carpets over and above the capacity in 1951. In 1947, the country had no productive capacity for paper or paperboard ; the Pakistan Industrial Development Corporation has taken a lead in establishing paper and board mills. The nominal manufacturing capacity of sugar in 1947 was 65 thousand tons a year though the actual production was very much less ; in 1951, the actual production was 39 thousand tons ; the Six-Year Plan lays down a target of 100 thousand tons over and above this figure. Sugar is an essential food requirement ; moreover, additional capacity needs to be developed to save foreign exchange ; in 1951, 59 thousand tons of sugar were imported. In 1952, the imports of sugar which included 57 thousand tons for stock-piling, rose to 212 thousands. The home requirements of sugar are estimated at 265 thousand tons a year. The actual production of cement in 1947 was 350 thousand tons a year ; the Pakistan Industrial Development Corporation has taken a lead in setting up factories with an additional capacity of 400 thousand tons a year. The Corporation has also taken an initiative in the establishment of a caustic soda-cum-chlorine plant, a D.D.T. plant and a fertiliser factory for the production of ammonium sulphate. During 1951-52 the imports of iron and steel manufactures amounted to 229 thousand tons. The U.S. Steel Export Co. invited by the Government in 1949 to survey the steel requirements of the country estimated that the annual requirements of the country would rise from 260 to 600 thousand tons in seventy years. The absence of any provision for the engineering industry in the Six-Year Plan is, therefore, a conspicuous one ; the scheme of the Pakistan Industrial Development Corporation to set up re-rolling and fabricating capacity of 200 thousand tons of steel and structural material per year is another notable illustration of the initiative taken by the Corporation in the promotion of industrial development of the country.

## A REVIEW OF THE FOREIGN TRADE, 1948-52.

We make here a brief review of the salient features of the foreign trade during the four years ending June, 1952. The country has an economy based largely on the exports of agricultural raw materials and the imports of manufactured goods. We thus find that during the period under review jute and cotton were together responsible for well over five-sixths of the total export earnings, while three-fifths of the imports constituted consumer and capital goods. Wool and hides and skins account for nearly one-tenth of the export earnings. In respect of the export earnings, jute and cotton were almost equally important. In the first year after partition two-thirds of the jute was exported to India ; during the last year of the period under review, however, this proportion declined to one-third. The decision of the country not to devalue her rupee along with sterling brought about a crisis in the jute trade ; India stopped her purchases altogether ; even the U. K. and other European countries decided to pause in anticipation of a steep fall in prices with India out of the market. To safeguard the interests of the jute growers, the Government took emergency measures and introduced a price-support scheme. The Jute Board created in 1949 was responsible for operating this scheme ; efforts were also made to provide the jute growth with facilities for baling and marketing as well as those for the holding of jute on co-operative lines. The exports of jute which amounted to 6.05 million bales in 1948-49 dropped to 3.38 million bales in 1949-50 but again rose to 6.67 million bales in 1950-51. The next year saw a recession in the world demand for jute. The policy of a continuous expansion of jute cultivation pursued by India resulted in a decline in exports to her from 2.47 million bales in 1950-51 to 1.64 million bales in 1951-52. The export duty levied by India on its jute manufactures in 1950 and the consequent rise in prices charged by the Indian mills resulted in a drop in the consumption of jute manufactures in the world ; this led to a lowering of jute exports to the other countries of the world from 4.12 million bales in 1950-51 to 3.21 million bales in 1951-52. the total exports in the latter period being 4.85 million bales. To give the other manufacturing countries a certain advantage in relation to India in the price of raw jute, the Government levied a special licensing fee on jute exported to India.

Although the raw cotton export earnings are as important as those of the raw jute, the country is comparatively speaking a minor producer of cotton, its production being about five per cent of the world production. During the period under review the home production rose from 960 to 1750 thousand bales, while the home consumption was doubled and stood at 200 thousand bales in 1951-52. The exportable surplus has thus been steadily going up during the period. The low quality of the cotton has been a handicap and is responsible for the low prices at which it is sold in the world market. The exports of raw cotton which stood at 805 and 960 thousand bales in 1948-49 and 1949-50, respectively rose to 1370 thousand bales in 1950-51 when the U.S.A. cotton crop registered a fall and the world demand was on the upgrade. The next year, however, recorded a decline in the exports to 1095 thousand bales on account of a recession in demand and the markets were depressed. The Cotton Board was formed in 1951 to bring about stability in the trade and to take measures to lessen the feeling of uncertainty in the market brought about by frequent and violent fluctuations in price. To achieve this end, a price support scheme involving the fixation of a minimum price was put into effect in 1952.

On the imports side, the largest single item is cotton cloth and yarn, its cost in 1951-52 being three-tenth of the total imports. During the period under review, the imports of cloth rose from 291 to 397 million yards, while those of yarn rose from 54 to 80 million lbs., the corresponding figures for home production being 87 and 149 million yards of cloth and 9.2 and 19.8 million lbs. of yarn. On account of the policy of the Government to liberalise essential imports and to make the fewest possible changes in the open general license system such large imports could materialise. The value of imports of cotton and silk piecegoods declined from Rs. 39 to 23 crores between 1948-49 and 1949-50 but rose to the former level again in 1951-52 ; during this period, the value of cotton and silk yarn imports rose from Rs. 16 to 29 crores. The development of the textile industry at home would enable the bringing about of a reduction in the drain on the foreign exchange to this extent. The private sea-borne trade of the country accounts for nearly ninety per cent of the total private imports ; of this, during the period under review, 52 per cent of the total expenditure was made on consumer goods, about thirty per cent on industrial raw materials and eight per cent on capital goods.

We may conclude this section after making a review of the foreign exchange position during the period from January, 1948 to June, 1952. The net deficit in the balance of payments for this period amounted to Rs. 52 crores, exports and invisible receipts totalling to Rs. 728 crores and imports on private and government account, other payments on government account and invisible expenditure totalling to Rs. 776 crores (the adjustment for errors and omissions being a negative one of nearly four crores of rupees). The invisible expenditure or imports for the period amounted to Rs. 92 crores as against the invisible receipts or expenditure of Rs. 70 crores ; on account of the undeveloped character of shipping, banking and insurance services in the country, the drain on foreign exchange resources arising from the invisible imports continues to be excessive. Imports and other payments on Government accounts account for Rs. 204 crores as against the imports on private account of Rs. 480 crores. This high proportion of imports on Government account to the total imports is in contrast to the negligible proportion of exports on government account. For the period under review, over ninety per cent of the total foreign exchange receipts were accounted for by private commercial exports, the corresponding percentage for the commercial imports being as low as 62. The Government imports mainly consisted of the defence stores, sugar, coal, foodgrains and oil. Excluding the adjustment for errors and omissions, the deficit in the balance of payments for the period amounts to Rs. 48 crores ; the country had a deficit of Rs. 162 and 56 crores, respectively, with the sterling and the dollar areas ; on the other hand, she had a surplus of Rs. 16 crores with India, her surplus with the other countries being much larger, *viz.*, Rs. 154 crores. This analysis of the deficit in the balance of payments among the various currency areas shows that the country overdrew dollars from the central reserves of the sterling area during this period ; it should, however, be noted that the country helped, in this period, to reduce the sterling area's deficit with the European Payments Union which came into being in 1950 ; for, during the two years ending June, 1952, it had a surplus of Rs. 64 crores with the E.P.U. countries excluding the U.K. Consequent to partition, the country received a share of the gold, dollar and sterling balances of the Government of undivided India ; the amount of these external reserves as they stood in June, 1952 was Rs. 105 crores.

# INDEX

A

Abnormal Importations Act 200
abolition of zamindari 47, 58, 59
Academy of Sciences, U.S.S.R. 299
A.C.L. 476
Acworth Committee 418 et seq., 425, 429, 430, 444
Acworth, Sir William 418
Administration of Foreign Operations 159
Ag-mark 50
Agricultural Act 4, 8
Agricultural Adjustment Act 38, 39, 40
agricultural banks (Pak.) 535
Agricultural Commission 430
Agricultural Credit Act 6, 36
agricultural debt, liquidating 36
agricultural education and research 65 et seq.
Agricultural Enquiry Committee (Pak.) 534, 535
Agricultural Extension Organization 79
agricultural finance, Germany 22; Pak. 534-36; India 48 et seq., 60 et seq.
Agricultural Finance Corporation (Pak.) 535
agricultural holdings, U.K. 3
Agricultural Marketing Act 8
agricultural marketing in India 49, 63 et seq.
Agricultural Mortgage Corporation 6
Agricultural Organization Society 7
Agricultural Produce (Trading & Marketing) Act 50
Agricultural Wages Act 5
Agricultural & Industrial Banks 29, 30
Agriculture (Pak.) 531-537
agriculture and the Soviet Plans 15 et seq.
agriculture, rehabilitation of British 4
agriculture, State aid to; U.K. 7, Japan 28
Air Commerce Act 367
Air Convention of 1919 334
Air Corporations Act 488
Air Mail Act 369
Air Transport Inquiry Committee 485 et seq.
Air Transport Licensing Board 483, 485
All-Up Mail Scheme 484, 485
Aiyar, Sir C. P. Ramaswamy 464
Allen, G. C. 229
Allied Occupation 31, 33
All India Spinners Association 54, 55
All India Village Industries Association 54
All Union Chamber of Commerce 163
Alsace-Lorraine, Germany's loss of 21
amalgamation of British railways 262
amalgamation of German railways 321
American economists 181
American tariff policy 174
Amotorg Trading Corporation 161
Anderson Act 43
Angrey, Kanhojee 451
Anhansen 23
animal husbandry and dairying 66
artel 15
artificial insemination centres 66, 77
Assam rail link 436
Assam, railway problem of 436
Atlantic Charter 184
auto-bahn 376
Aviation Commission, Federal 369
aviation since nationalisation, India 489, 490
Ayyangar, late Shri Gopalaswami 443

B

balance of payments (Pak.) 546, 547; U. K. 205 et seq.
Baltic Insurance Co. 161
Bank of England 6
banks in U. S. A. and agriculture 35 et seq.
Barter Agreements (India) 129
barter agreements (occupied Japan) 239
Battle Act 191
B. E. A. 280, 281, 283, 284
Benefits of railway regrouping 443
Bhabha, Mr. C. H. 466
Bhakra-Nangal Project 68, 70, 438
Bhave, Acharya Vinoba 47
Bhoodan movement 47
Bhore Award 462
Bhore, Sir Joseph 462

bilateral trade treaties (Germany) 249
bilateralism 91
Bismark 21
Black-Mckellar Act 369
Black Sea Co. 161
"Black Tariff" 179
'block rates' 429
B. O. A. C. 280, 281
Bombay-Lancashire Textile Agreement 110-113, 114
Bombay Millowners' Association 112
Bombay State Road Transport Corporation 405-416
Bombay Steam Navigation Co., Indianization of 463
Bowley, Prof. 511, 513
Brahmaputra Project 536
Brannan Plan 43, 44
break-up of landed estates 6
British Import Duties Act 106
British Industries Fair 216
British pound 100
British Road Services 289
British Textile Mission to India 110, 111
British Transport Commission 266, 267 269, 273, 290 et seq.
Bruning Government 22
Brussels Convention 20
B. S. A. A. C. 280, 281
Burma, India's separation from 120, 122
business recession of 1937 89
Buy-American Legislation 191

C

Canadian Loan 212
Cattle Industry Act 9
Cattle Purchase Act 40
Cattle Utilisation Committee 52
Caustic soda-cum-chlorine plant 542
Central Land Utilisation and Soil Conservation Organisation 67
Central Research Institutes 52
Central Road Fund 393
Central Roads Organization 397
Central Road Research Institute 398
Central Scientific Research Institute 299
Central Statistical Organization 521
Central Tractor Organization 72, 73, 77
Central Water and Power Commission 70, 479
Chambal Project 69
Chandigarh rail link 437
Cheap money policy 27
Chinese Eastern Railway 294
Chinese Indemnity 29
Chittaranjan Workshop 434, 435
Chunar-Robertsgunj line 438
Civil Aeronautics Act 369, 370
Civil Aviation Act, 1946, 280, 281
Civil aviation, subsidy to (U. S. A.) 368
Civil War (U. S. S. R.) 145, 146
Clair Wilcox 181
Clare Lees, Sir W. 110
Clark, Mr. Colin 18, 522, 527, 528, 529 533, 534, 538
Coastal Conference 455, 461; Indian 468
Coastal Reservation Bill 458, 459, 463
coastal trade, reservation of, India 467-469; Japan 381, 382; U.S.A. 364
co-existence of Private and public sectors 156
collective farms 16, 17, 18
Colombo Plan 136, 440
Commercial policy, India 132 et seq., 135; Germany 248 et seq.; Japan 228 et seq.; U. K. 198 et seq.
commercial supremacy of U. K. 194
commissariat of Commerce 156
commissariat of Foreign Trade 162, 165, 166
commodity Committees 52, 65
Community development projects 56, 64, 65, 67, 79
competition for the Indian market 84
Compromise Tariff Act 179
Condliffe, J. B. 251
Conference, Tripartite 461, 462
Consolidated customs Law 252
consolidation, process of 20
Control of Shipping Act 467
Controls, System of 139, 140
Convertibility 190, 193; Sterling 100
Co-operative Marketing 41, 63
co-operative movement 49, 60, 62; banks 49, 61
Co-operative Planning Committee 61
Co-operative Societies Act 46
co-operative societies, peasants' 30
Corn Laws 1
Corn Production Act 4, 6
cottage and small scale industries (Pak) 540
Cotton Board 545
Cotton Development Scheme 74
Curzon, Lord 516

D

Dadabhai Naoroji, Dr. 516

Dai Nippon Koku Kabushiki Kaisha 389, 390
Damodar Valley Project 68, 70, 136, 138
Dawes Plan 244, 318
D. D. T. plant 542
  deferred rebate 453 et seq.; abolition of 463
  deficit financing 135
  depreciation of yen 27, 28, 88, 118
Deruluft 335
Desert Afforestation Research Station 67, 78
Deshmukh, Mr. C. D. 100
Deutsche Lufthansa A.—G. 336, 337
Deutsche Reichsbahn Gesseleschaft 315, 316, 317, 318, 319, 320
Deutsche Vertehrs flug A.—G. 337
Deutsche Zeppelin—Reederei 337
  devaluation of Indian rupee 74, 79, 101
Devaluation of the pound 99, 212, 213; and dollar area 132
Devchand, Mr. Kilachand 453
Dharsey, Mr. Mooljee 453
  'dirty hands' 65
Dobb, Morris 525
Docks and Inland Water Executive 266, 267
  "dollar gap" 190
  dollar shortage 185 et seq.
Douglas, Paul 181
Dufferin 457
Dyestuffs Importation Act, 1921, 199

E

East India Railway Committee 418
East-West Trade 191
Eastern Shipping Corporation Ltd. 467
Economic Appraisal Committee (Pak.) 533, 535, 538, 539
Economic and Technical Programmes 188, 192
Economic Co-operation Act 42
  economic nationalism 86
  economic supremacy of U. K. 270
Edict of Emancipation 11
Eisenhower, President 182, 189 et seq.
Emergency Tariff Act 180
  emigrant sanitary control stations 326, 327
Empire Air Mail Scheme 481, 484
Empire Dollar Pool 207
English Commercial Corporation 204
EROA 238
European Economic Co-operation 100
European Payments Union 100, 212, 255, 258, 547,
European Recovery Programme 42, 212, 255
  exchange control 28; Germany 245 et seq.; Japan, 229 et seq.; Law 232; U. K. 214
  exports and imports, regulation of 134
Export Compensation Scheme 30
  export control 96
Export Council (U. K. ) 204
Export Credits Guarantee Dept. 204, 216
  exports policy 97
  export surplus of U. S. A. 137 et seq. 185
  external assistance to India 133, 135 et seq.
  extension organisation 60
Extension Service 44

F

Farm Credit Administration 39
  farming, mechanisation of 5
  farming technique, primitive (Russia) 12
Federal Aviation Commission 369
Federal Farm Board 36
Federal Farm Loan Act 36
Federal Farm Loan System 23
Federal Farm Mortgage Corporation 39
Federal Food, Drug and Cosmetic Act, 1938, 41
Federal Highway Act 344
Federal Maritime Board 364
Federal Railway Authority 431
Federal Reserve policy, 1920, 35
Federal Soil Conservation Service 44
Fenelon, Dr. K. G. 269
  fertiliser factory 542
Finance and regulation of trade in U. K. 213 et seq.
  financial agencies, integration of 63
Fiscal Commission 429, 430
Fisher, Prof. Irving 181
  fisheries 67 et seq.
Fisheries Convention 33
Fisheries in India 53 et seq.
  fisheries, role of (Japan) 32
Five Year Plan and Indian agriculture 55 et seq.
Five Year Plan and India's Foreign Trade 132 et seq.
Five Year Plan and Indian railways 439 et seq.

floods in India 102
  food crisis in India 102
Food Loan, U. S. 136
  food self-sufficiency in Japan 31
  food storage godowns 79
Ford Foundation 65, 79, 136
Fordney-McCumber Tariff Act 180
  foreign aid, U. S. 187 et seq., 190
  foreign economic policy of the U.S.A. 189 et seq., (see also M.E.D. Vol. I pp. 241-243)
  foreign exchange control 97
  foreign exchange market, control of 96
  foreign exchange resources 133, 134, 140
Foreign Exchange Revolving Fund 233
  foreign investment, U. S. 190, 192
  foreign loans and German recovery 242
Foreign Operations Administration (U.S.) 187
Foreign Operations, Administration of (U.S.S.R.) 159
  foreign trade (Pak.) 544-547
Foreign Trade (U.S.S.R.) 145; monopoly of 157
Foreign Trade Association Law 232
Foreign Trade, People's Commissariat of 156, 158, 159, 160, 162
  foreign trade, control of 92
Foreign Trade Corporation 138; Pradhan's suggestion for 142 et seq.
  foreign trade policy (India) 86
Forest Research Institute 67, 78
  forward contracts 17
Four Year Plans, Hitler's 245, 246
  fragmentation of holdings 48
Frank Graham 181
Frazier-Lemke Mortgage Moratorium Act 39
Free Breakfast Table policy 179
Froom, Sir Arthur 455, 457
  full employment in Germany 246

G

G. A. T. T. 97, 185
Gandhi, Mahatma 450, 460
Gandhidham-Deesa line 438
Ganga Bridge Project 437, 449
Ganga-Brahamputra Water Transport Board 479
Ganges-Kobadak Scheme 536
  garden plots 9
GARIOA 235, 238, 384
German banking system 22
German Federal Railway 323, 324
German Surrender 252, 257
German trading methods 251, 252
Geneva, drafting of Trade Charter at 185
Ghuznavi, Sir A. H. 464
  gold bloc 86
  'gold-blocade' 155
  goods transport, nationalisation of 415, 416
Gosadans 66, 67
Gosplan 164 et seq.
Gostorgs 158
Govt. assistance to oversea trade 215 et seq.
  grading and fumigation 78
Graham, Frank 181
Gray, Mr. Gordon 364
Great Lake System 350
Greater Volga Scheme 307
Grow More Food Campaign 51, 60, 61, 71, 72
Grow More Food Conference (Pak.) 532, 533
Grow More Food Enquiry Committee 60, 71
Guggenheim Foundation 367

H

Hailey, Lord 424
Haj Pilgrimage and rate war 462
Haji, Mr. S. N. 454, 458, 459, 460, 463
Hapag-Lloyd Union 330
Havana Charter 97, 143
Hawley-Smoot Tariff Act 181; amendment of 182
Hazra Engineering Company 138
Headlam, Mr. 455
  helicopters 311, 371
Hindustan Shipyard Ltd. 476, 477
Hirachand, Mr. Walchand 453, 461, 465
Hirakud Dam Project 68, 70
Hitler 245, 249, 250, 335
Hoch-Smith Resolution 339
Home Charges 100
Hope-Aiken Act 43
Horticultural Products Act 200
Hotels Executive 267, 269
  hydro-electric projects (Pak.) 540
Hypothec Bank of Japan 29, 30

I

I. M. F. mission to India 137
Imperial Agricultural Society 26
Imperial Airways 280
  imperial economic co-operation 87

imperial preference 91, 198
import control 96
Import Duties Act 200
Import, Export and Customs Powers (Defence) Act 203, 214
imports and exports, regulation of 134
imports policy 97
Inchcape Committee 425
Inchcape, Lord 424, 454
India, Commercial Policy of 132 et seq.
India, membership of, Sterling Area 99 et seq.
India, Sterling balances of 95
India, Trade Agreements of 106-132
Indian Agricultural Research Institute 51, 52
Indian Aircraft Act 483
Indian Central Oilseeds Committee 76
Indian Central Sugarcane Committee 76
Indian Council of Agricultural Research 51, 52, 64, 65, 79
Indian railways, financial extravagance in 428
Indian Retrenchment Committee 424
Indian Roads Congress 395
Indian rupee, devaluation of 74, 97, 101
India's projects, U. S. Aid for 138
India's separation from Burma 120-123
India's Trade Commissioners 143
indigenous industry (Pak.) 539
Indo-Burma Trade Agreement (1941) 122-123
Indo-Japanese Trade Convention 88, 117, 118
Indo-Japanese Trade Treaty 89, 88, 117-120
Indo-Pakistan Trade 102 et seq.
Indo-U. S. Technical Co-operation Programme 79, Assistance 440
Industrial Bank for Ship-building 379
Industrial Commission 429, 430
Industrial development (Pak.) 538-543
Industrial Finance Corporation (Pak.) 538
industrialisation and foreign trade of India 90
inflation, German 24
inheritance law 22
inland water projects 479, 480
Innes, Sir Charles 427, 456, 459
inter-city transport (U. S. ) 345 et seq.
Inter-State Agreement (India-Pakistan) 103
Inter-State Commerce Commission 339,341, 345, 346, 347, 349, 350, 351, 369
inter-zonal traffic in Germany 323
International Air Commission 366
International Air Convention 366
International Bank for Reconstruction and Development 136, 137, 184
international creditor, U. S. as 35
International Monetary Fund 99, 137, 141, 184
International Trade Organisation 143, 184, 185
International Wheat Agreement 72
Irrigation Development Fund 71
irrigation and power 68 et seq.
Irwin, Lord 460
Iyer, Sir P. S. Sivaswamy 455

J

Jamal, Sir Abdul Karim 453
Japan Air Lines Company 390
Japan Air Transport Company 389
Japan Airways Company 389, 390
Japan Airways Company Law, 1939 390
Japanese assets, freezing of 235
Japanese Competition in world markets 220 et seq.
Japanese tariff law 228
Jayakar Committee 394
Jayakar, Dr. M. R. 394
Jews 22
Joint Economy policy 466
Jones Act 355
Junkers 20, 21, 22, 335, 336
Jute Board 544
jute cultivation, expansion by India 545
Jute Development Scheme 75

K

Kalinia, President 297
Kendla 473
Kandla-Deesa rail link 433
Karnafulli Project 540
Kelly Act 366, 368
Key-village scheme 66, 77 et seq.
Khadi Pratisthan 55
Khaikhalashi banks (Pak.) 535, 536
Khambatta, Mr. 516
Khandwa-Hingoli line 437
Kidwai, late Mr. Rafi Ahmad 484
Kolkhoz 16
Kosi Project 69
Koyna Project 69
Krishna Project 69
Kulak 12, 14, 15
Kurram-Garhi Project 537
Kuznets, Mr. Simon 493, 494, 479

L

Labour Govt. first British 199
Labour Govt., second British 200
  laissez-faire in British agriculture 4, 7
Lajpat Rai, Lala 459
Land Mortgage Banks 49, 61, 62
Land Mortgage Credit Association 22-23
  land reclamation 77
  land reforms in India 58 et seq.
Land-schaft 22
  land tenure system in Japan 26, 31
Land Utilization and Soil Conservation Board 67
  landed estates, break-up of 6
Lausanne Agreement 319
Leadenhall Street 457
League of Nations 181, 366
Leichte Guterzuge 316
  lease-lend 41, 42, 154
  levy of betterment fee 70, 71
Lift Irrigation Project 537
  link system in foreign trade 233
Livestock Industry Act 9
London Transport 267
London Transport Board 289
London Transport Executive 267, 289 et seq.
Low, Mr. C. R. 451
Lower Bhavani Project 68
Lower Sind Barrage Project 536
Lower Tapti Valley Project 68
Luftschiffban Zeppelin 337

M

Machkhund Hydro-electric Project 68
Mackay Committee 417
Mance, Sir Osborne 357, 377, 381
Manchuria Aviation Company 389
Manjri 65
Maritime Board, Federal 364
Maritime Commission, U. S. 357 et seq.; Postwar Planning Committee 361, 362; abolition of 364
Maritime Transportation Law 385
  mark, fall of 24
  marketing boards 8
Marshall Aid 42
Master, Mr. M. A. 464, 466
Mathai, Dr. John 392
Mathur, Mr. K. B. 449
Mayurakshi Project 68
Mc Carran-Sea Act 369
Mc Kenna duties 199
Mc Kenna, Reginald 199
Mc Kinley Tariff Act 180
Mechanical Cultivation Project 537
  mechanisation of farming 5, 17, 18
Mehta, Mr. Asoka 450
Meiji era 28
Merchant Marine Act, 1928 356; 1936 357,358, amendment of 1938 360, 363
Mercantile Marine Committee, Indian 455, 457, 458
Merchant Marine, Economic Survey of American 358-360
Mianwali Project 540
Milk Board 66
  military assistance, U. S. 187
Minimum Wages Act 47
Minseito Government 27
  mir (Russia) 11
Mody, Sir H. P. 110
Mody-Lees Pact 110-113
  monopoly of foreign trade in U.S.S.R. 157
Morarjee, Mr. Narottam 452, 457
Morril Tariff Act 179
  mortgage credit association 22
Moscow-Volga Canal 306
  motor scooter 376
Motor Transport Law, 1933 318
  motor transport, nationalisation of (India) 400-416
Motor Vehicles Act 401
Motor Vehicle Central Act 375
Muck, Otto 335
Mukerjee, Mr. P. C. 449
Mukerjee, Sir Rajendra Nath 419
Mukerian-Pathankot line 436-437
  multi-purpose co-operatives 58
  multi-purpose projects 70
  multi-purpose societies 61; Pak. 535
Muranjan, Dr. S. K. 516
Mushran, Mr. K. P. 449
  mutual-aid agreements 184
Mutual Aid Programmes 212
Mutual Defence Assistance 212

N

Nagpur Plan 395 et seq.
Nagpur Report 395 et seq.
Nari-Bolan Project 537
National Agricultural Credit and Development Corporation 63
  national extension service 61, 71, 79, 138

National Income 493 et seq.
National Income Committee, Indian 514, 517
  national income, first official estimate in U. K. 512
  national income, international comparisons of 529
National Income Unit 521
  nationalisation, declared ideology of 143
  nationalisation, principles of 157
Navigation Acts 271, 452
Nazi fear 89
Nazi regime 22
New Deal 37 et seq. 88, 368
New Economic Policy 14 et seq., 145, 146, 156, 157, 158
New Indo-British Trade Agreement (1939) 114-117
New Indo-Japanese Trade Agreement (1937) 120-122
Nehru, Pandit Jawaharlal 450, 475
Nehru, Pandit Motilal 459
Neogy, Mr. K. C. 464
Night Air Mail Scheme 484, 485
Nihon Koku Yuso Kabushiki Kaisha 389
Nippon Yusen Kaisha and Mitsubishi interests 380, 381
Norddeutscher Lloyd 336
North Atlantic Shipping Conference 332
Norwegian aid 136
Nutrition Advisory Committee 46

O

Occupation 33
O. E. E. C. 100, 212
Oelag 337
Ottawa Conference 201 et seq.
Ottawa Trade Agreement 9, 87, 88, 89, 106-110, 113, 114

P

Pakistan 99, 126, 129, 531-547
Pakistan, India's trade with 102 et seq.
Pakistan Industrial Development Corporation 538, 541, 542, 543
Pakistan products, campaign to patronize 539
Pakistan rupee 104
Pakistan Tariff Commission 539
Pakistan, U. S. Military Aid to 188
Pan-American Air lines 371
Panama Canal 353
Pande, Mr. G. 449
Patel, Sardar 462, 475
Patel, Mr. Vithalbhai 458
Partition (India) 46, 73-74, 75, 97, 101, 432, 434, 436, 441, 478, 483, 484
Patterson, Mr. E. M. 181
Paul Douglas 181
Payne-Aldrich Act 180
Peace Treaty, 1952 384, 385, 390
People's Commissariat of Finance 166
People's Commissariat of Foreign Trade 156, 158, 159, 160
People's Commissariat of Home Trade 159
People's Commissariat of Supply 160
  petition to President Hoover 181
  petroleum refinery 134
Pillai, Mr. Chidambaran 453
Planning Commission (India) 56, 58, 59, 60, 62
  planning of Soviet foreign trade 163 et seq.
  plant breeders and extension workers 64
  population (Japan) 31, 32
  ports, docks and harbours (U. K. ) 277, 278
Potato Research Institute 52
Potsdam Agreement 253
Potsdam Conference 332
Potsdam Declaration 252
  pound sterling, devaluation of 99
  power alcohol industry 134
Pradhan, N. S. 138
Prasad, President 475
  'price-scissors' 14 (see also M. E. D. Vol. I. pp. 293 et seq.)
Private property, abolition in land 13
  private and public sectors, co-existence of 156
  processing and marketing committee of exports 63
  programme balance of payments 188
  progress of the Five Year Plan 71 et seq.
Prokopovitch, Prof. 522, 523
  protection areas 67
  protectionist revival (Germany) 249
Public passenger transport 345 et seq.
Public Works Loan Commission 6

Q

Quilon-Ernakulam line 437

R

Radcliffe, Mr. W. L. A. 464
Raiffeisen co-operative bank 22, 23, 24
Raiffeisen, Frederic 23

rail link, Chandigarh 437
rail road competition, Germany 315 et seq.; Japan 376; U. K. 264 et seq.; U. S. 347, et seq.
rail road co-ordination 265
Railway Act 262, 263
Railway Board (U. S. S. R.) 293
Railway Board 417, 421, 422, 427, 431, 442; reorganization of 425-426, 448, 449
railways, British and Canals 266 et seq.
Railway Budget 420, 426, 445, 447
Railway Conventions 444; of 1924 444; of 1943 445; of 1949 446
Railway Executive 267, 268, 269
Railway Finance Committee and the Inchcape Committee 424
Railway Labour Act, U. S. 339
Railway Law of 1924-30 320, 321
Railway Plan 435
Railway problem of Assam 436
Railway rates policy 429, 430
Railway Rates Tribunal 263
Railway regrouping (India) 441 et seq.
railway regrouping in U. K. 262
Railway Tribunal (Germany) 320
Rainey, Sir George 459, 463
Randall Commission 182, 189, 191
Rao, Dr. V. K. R. V. 516, 517
Rates Advisory Committee 430, 431
rate war 453 et seq; in Haj Pilgrimage 462; Konkan 462, 463
rationing, Germany 21; U. K. 10
reclamation of, land in Japan 31
reclaimed land 56
Reciprocal Trade Agreements Act 182 et seq.
redundency scheme (Japan) 30
referendum of the U. S. farmers 38
Refinery products 468, 469
regrouping, benefits of 443
regulation of exports and imports 134
Reichsbahn 314, 315, 318, 323
Reichs post 314
reparations 241, 243, 248
Reparations Agreements 319
Reparation Commission 318
Reparations Recovery Act 199
Research and Marketing Act 41
Reserve Bank of India 49, 50, 61, 62, 96
Restoration 25
Rice Act 26
Rice Research Institute 52
rice yields, Japanese 32
Rihand Project 69
Road Haulage Executive 267, 288, et seq.
Road Passenger Executive 267
road policy (U. K.) 287
Road Relief Bill 322
Road Transport Corporation Act 405, 414
Roosevelt, President F. D. 37, 369
Royal Commission on Agriculture 51, 52
Rupar-Nangal Railway 438
rupee, Indian 82
rupee, Pakistan 104
Russel, Sir John 52
Russian Petroleum Products Co. 161
Russian railways in the postwar plan 300 et seq.

S

Safeguarding of Industries Act 199
sailing vessels 472
Sailaba Cultivation Project 537
Sakhalin Shipping Trust 304, 305
Samaldas, Mr. Lallubhai 453, 454
Sansom, Sir George 380
Sarda Power House Project 68
Sastri, Mr. V. S. Shrinivasa 419
S. C. A. P. 236, 238, 239
scientific research in Russian railways 299
Scindia Steam Navigation Co. Ltd. 452 et seq.
Scrap and Build programmes 379
Seager, Mr. Henry R. 181
Seebohm, Dr. Hans 323, 324, 325
self-contained America 175
self-sufficiency in agriculture 22
self-sufficiency in food, Japan 31
Separation Convention 1924 428
separation of Burma 46
separation of the railways and the general budgets 423
serfdom 11
speculation in land 70
Shah, Prof. K. T. 516
Shastri, Mr. Lal Bahadur 416, 435, 467
shipbuilding, Govt. assistance to, Japan 386
ship building programme, postwar, Japan, 386
ship owners and ship builders, credit facilities to 379
Shipping Act, U. S. 353, 355
Shipping Board, U. S. 353, 354, 355, 356, 357
Shipping Board, Emergency Fleet Corporation 353, 354

Shipping Conferences 385
Shipping Conference, Joint 460
Shipping Insurance Co. 161
  shipping lines, British 274 et seq.
  shipping organizations, U. K. 276 et seq.
  shipping policy; postwar (U. S. A.) 363; of Govt. of India 466, 467
Shipping, Reconstruction Policy Sub-Committee on, 464 et seq.
  shipping, tramp (U. S. A. ) 360
Shipping and Five Year Plan 469-473
  shipping and foreign trade (U. K.) 197
  shipping and Govt. 277
  ships, fighting 355
Ships Sales Act 362
Shirras, Prof. Findley 516
Six-Year Plan (Pak.) 532, 533, 534, 541; industrial progress under 541, 542.
  slaughter of livestock 16
  social accounts 502, 506, et seq.
  soft currency countries 97
  soil conservation 67, 68
Soil Conservation Act 40
  soil erosion 53
South Manchurian Railway 389
Soviet agriculture and Five Year Plans 15 et seq.
Soviet air transport and Postwar Plan 310, 311
Soviet foreign trade, organization of 155 et seq.
Soviet foreign trade, planning of 163 et seq.
Soviet Medical Air Service 308, 311
Soviet mercantile marine in Postwar Plan 304, 305
Soviet Merchant 159
Soviet railways in the Plan era 295 et seq.
Soviet Trade Delegations 147, 148, 156, 158, 160, 161
Stamp, Lord 511
  standard revenue, principle of 263
Standard Weights Act 50, 64
Stakhanov movement 298
State aid to agriculture, U. K. 7; Japan 28, 30
State Bank of Pakistan 535
State Co-operative Banks 49
State monopoly of foreign trade 138 et seq.
State ownership of civil aviation 487, 488
State trading 144; U. K. 215
State Transport, Bombay 404-416
State Transport in Plan era 414, 415
Sterling Area 96; India's membership of 99 et seq.
  sterling balances ; India 95, 99, 100
  sterling bloc 86, 107
  sterling, convertibility of 100
Stewart, Dr. 52
  strike of British railwaymen 264
  stock market crash, 1929 36
  subdivision of holdings 48
  subsidy to civil aviation (U. S. A.) 368
  subsidies to ship building 273
  subsidies to shipping; Japan 378, 379; Germany 329 et seq.; U. S. A. 357
Sugarcane Development Scheme 76
  supply of power (Pak.) 540
Supreme Court, U. S. 39, 40
Surrender, German 252, 257
  survey of soils and land utilisation 67
Swadeshi 84
  system of controls 139, 140
  system of land tenure in Japan 26, 31

T

Takahashi 27; assassination of 28
Tank-Zam-Gomal Project 537
Tariff of Abominations 179
Tariff Act of 1789 (U. S. ) 179
Tariff Act of 1816 179
Tariff Act of 1872 179
Tariff Act of 1928 179
  tariff policy, American 174, 178 et seq.
Tariff Policy, India 132 (see also M. E. D. Vol. I. pp. 346 et seq.)
Tata, Mr. Jamshedji 453
Tata Sons Ltd. 481
Taunsa Barrage 536
Taussig, Frank W. 181
Technical Co-operation Aid Programme 67
Technical Co-operation Assistance, U. S. 136; programmes 188
Thakurdas, Sir Purshottamdas 419
Thal Project 536
Torgpredstva 161
  tractor stations 18
Trade Agreements Act 191
Trade Agreements of India 106-132; Japan 230; U.K. 202 et seq.
Trade Agreements, recent (of India) —123-132
    Australia 123
    Burma 123, 131
    Ceylon 123, 131
    Egypt 124, 125, 126
    Afghanistan 124

W. Germany 124, 128
Norway 124, 127, 128
Switzerland 124
Poland 125, 130
Italy 125
Sweden 125
Pakistan 126, 129
Austria 126, 127
Finland 127
Hungary 128
Indonesia 129
Argentina 129
Syria 129
Iraq 130
Turkey 130
Bulgaria 131
Yugoslavia 131
Czechoslovakia 131
U. S. S. R. 132
Rumania 132
trade charter 185
Trade Commissioners, India's 143
Trade Delegations, Soviet 147, 148, 156, 158, 160, 161
Trade policy 141 et seq.
tramp shipping, U. S. A. 360, 362; Japan 386
Transport Act, 1947 267, 288, 290; amendment of 1953 269, 291
Transport legislation in W. Germany 321 et seq.
transport problems of W. Germany 323 et seq.
transport services, denationalisation 289, 291
Transportation Act (U. S. ) 338, 339; trucking industry 346
Trans-World Airlines 371
Tripartite Pact 234
Truman, President 184
Tungabhadra Project 68
Tymms, Sir Fredrick 482

U

Underwood Tariff Act 180
unemployment in W. Germany 257
universal training 298
U. N. Technical Assistance Administration 479
urbanisation in Japan 25
U. S. aid for India's Projects 138
U. S. Economic and Technical Assistance 192
U. S. Food Loan 136
U. S. Foreign Aid 187 et seq. 190
U. S. Foreign Investment 190, 192
U. S. Military Aid to Pakistan 188
U. S. railways and labour troubles 342, 343
U. S. Steel Export Co. 542
U. S. Technical Co-operation Assistance 136
U. S. A. , export surplus of 173 et seq. 185
U. S. A., involvement in world economy 501
U. S. A., Military Assistance of 187

V

Vakil, Prof. C. N. 516
Varde, Mr. V. P. 63
Versailles Treaty 249, 250; and German shipping 327, 328, 333, 334, 335
village panchayats 58
Vishakhapatam 474-477

W

Wadia family 451, 452
Walker Tariff Act 179
War Agricultural Committee 3
ware housing 50
Warsak Project 540
Washington Loan 212
Watres Act 368
Wedgwood Committee 428, 430, 431
Wedgwood, Sir Ralph E. 428
Weimar Constitution 318; 320
Wheat Act 8
Wilson-Gorman Act 180
Wilson, President 180
works programmes 22
World *Bank* 136, 137, 184
world depression and Indian trades 86
world depression and Japanese agriculture 26
World Economic Conference 181
"Woollen Tariff" 179

Y

Yen-Bloc, laws relating to 233
yen, depreciation of 27, 28, 118
Yen Counterpart Fund 386, 387
Young Plan 319

Z

Zafrulla Khan, Sir M. 457
zamindari, abolition of 47, 58, 59.